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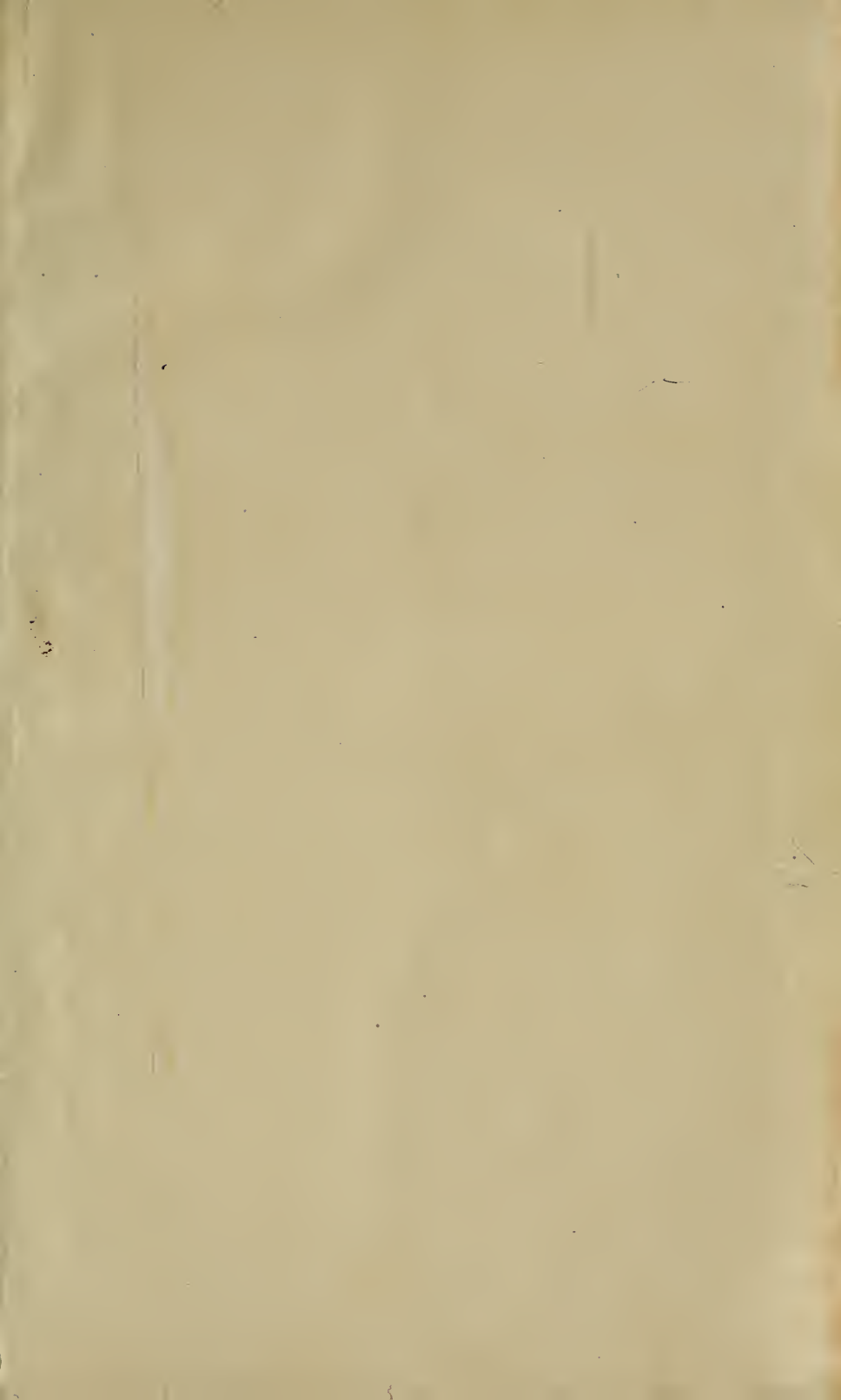
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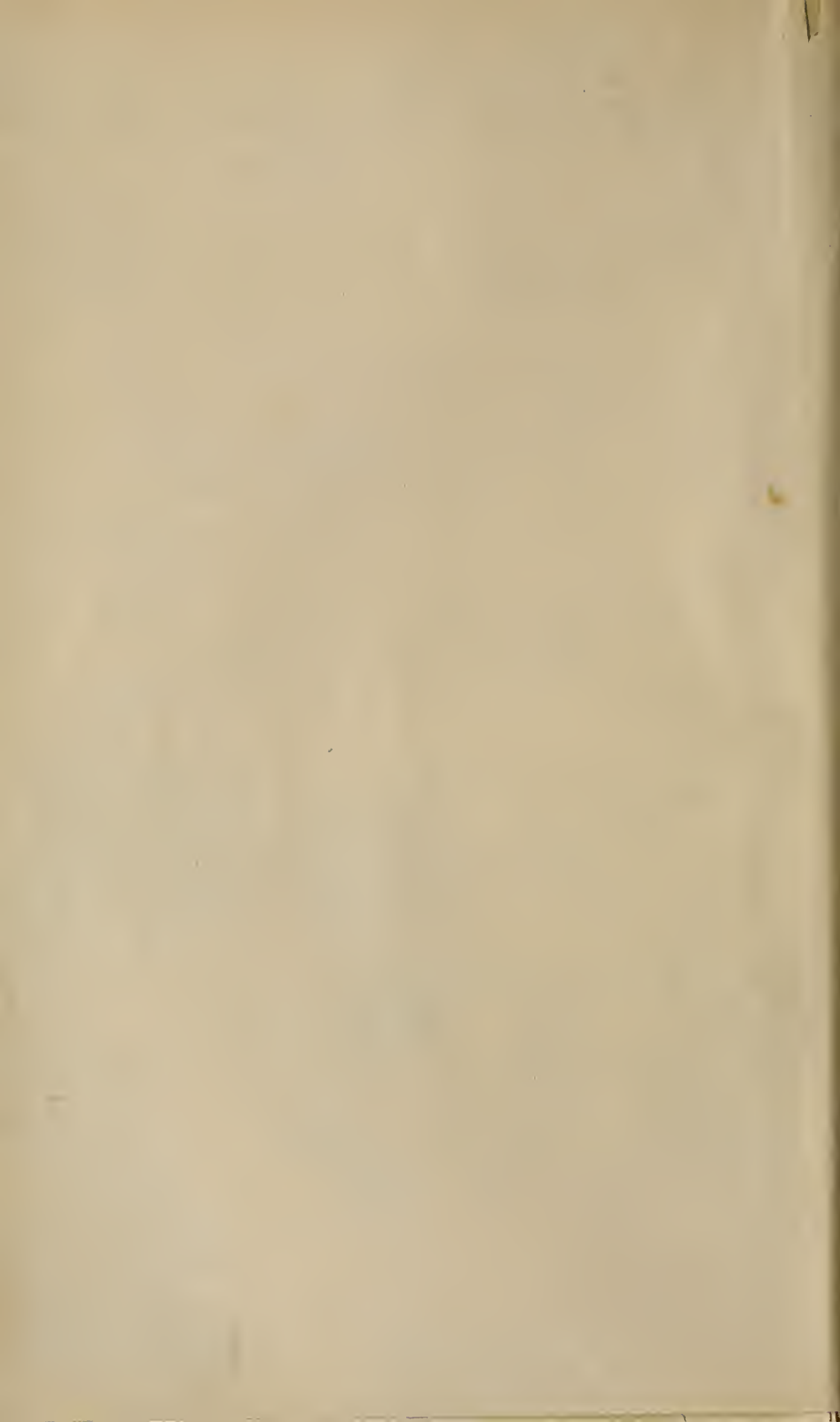


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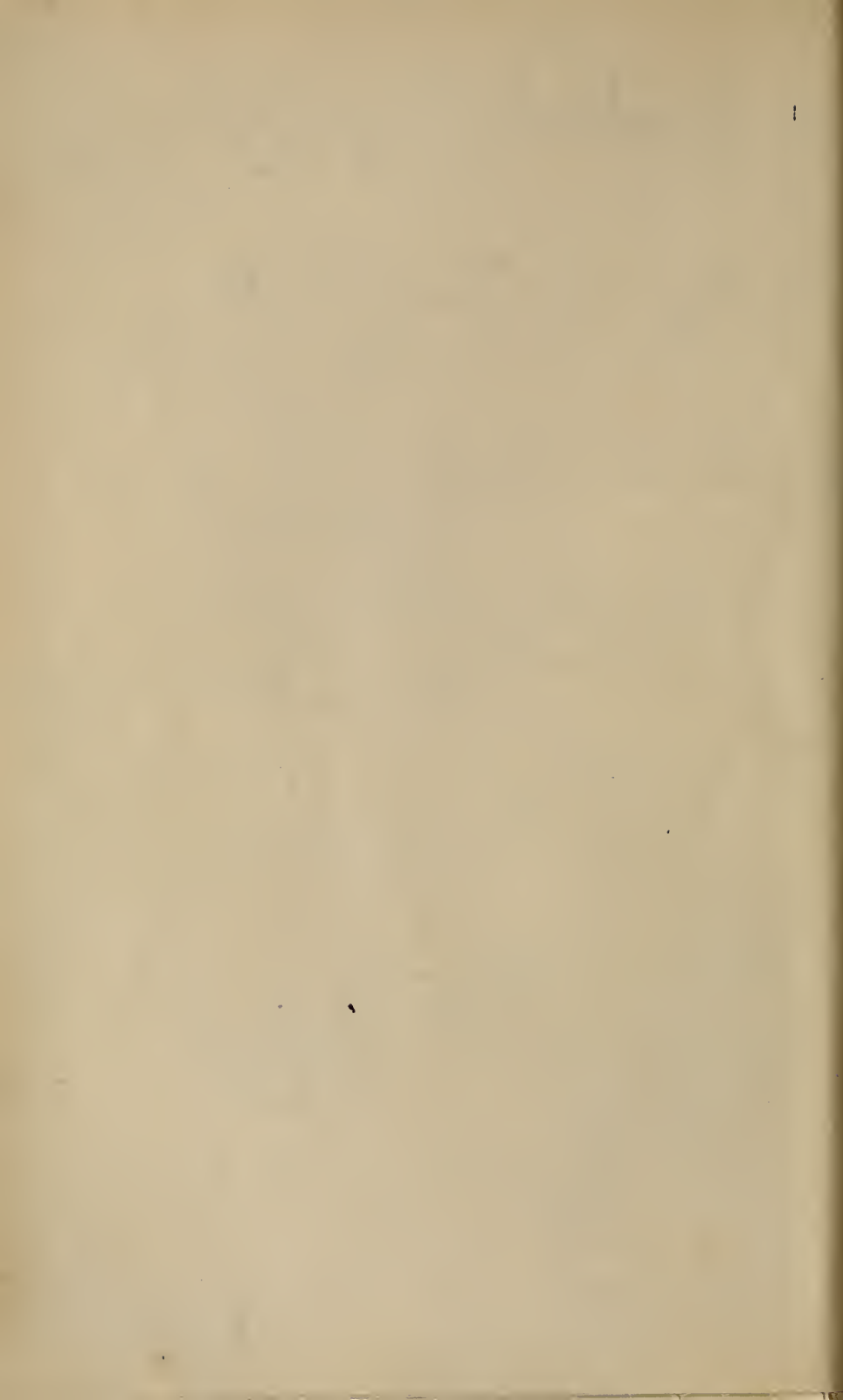
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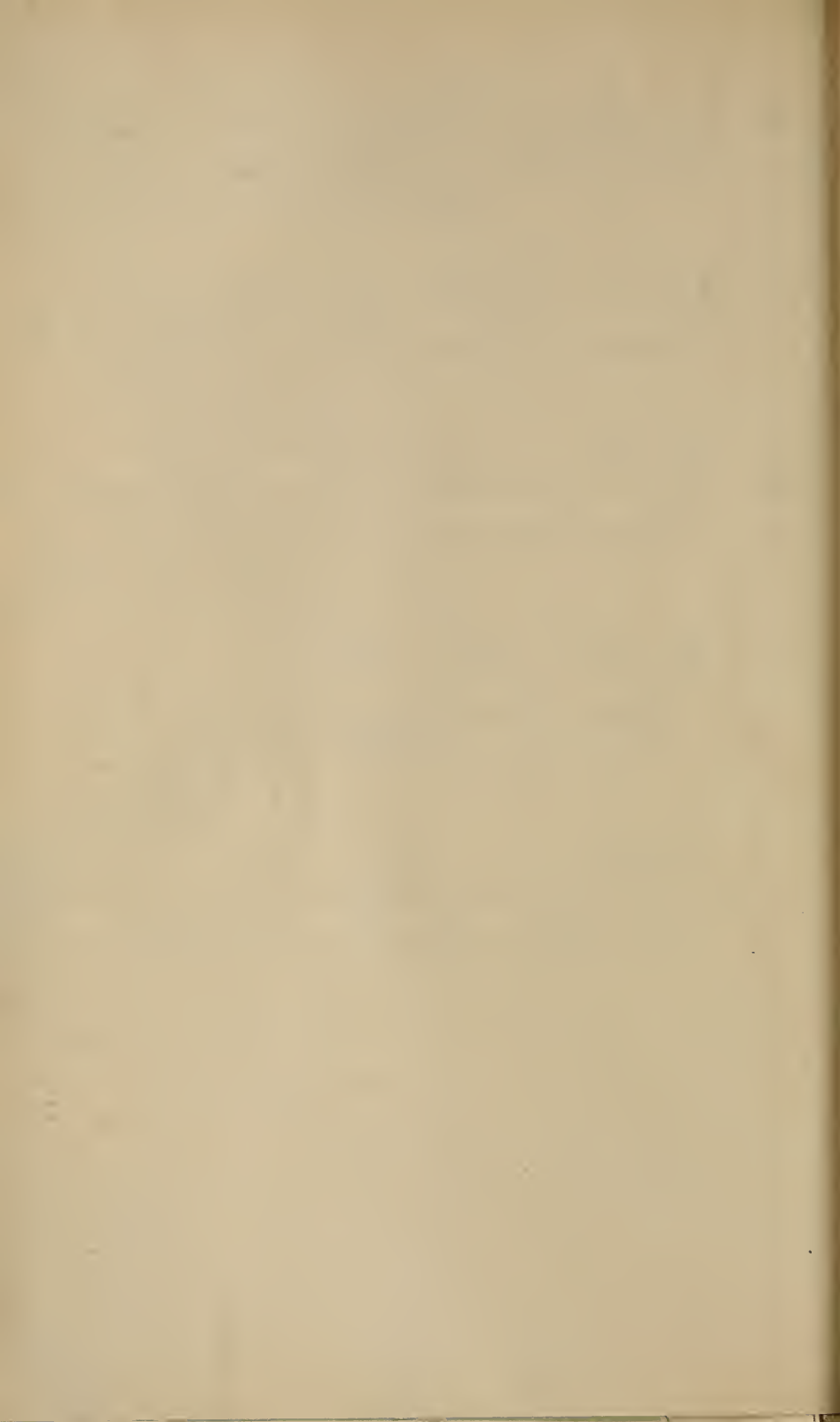




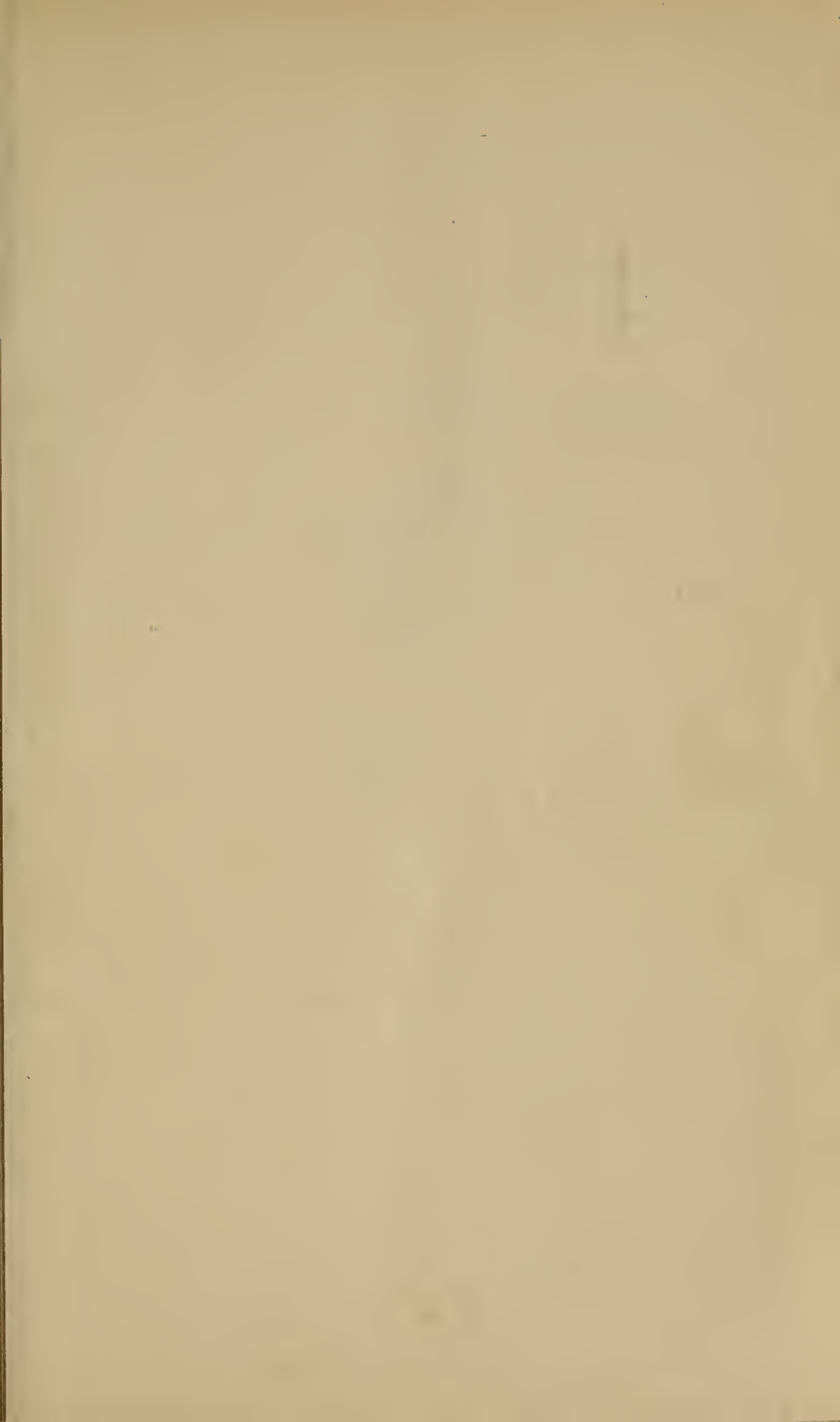
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GENERAL RAILROAD LAWS, #1

*Articles of Association and By-Laws*

OF THE

**PACIFIC AND ATLANTIC RAILROAD CO.**

WITH THE

**REPORTS**

OF THE

**CHIEF ENGINEER AND SECRETARY.**

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SAN FRANCISCO:  
WHITTON, TOWNE & CO., PRINTERS, EXCELSIOR OFFICE  
151 CLAY STREET, NEAR MONTGOMERY.  
1854.





SKETCH OF THE ORIGIN AND PROGRESS  
OF THE  
PACIFIC AND ATLANTIC RAILROAD COMPANY.

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As early as the winter of 1849-50, there was some talk of a railroad between San José and San Francisco, and Mr. LEWIS, the Engineer, made a rough estimate of the cost, but without personally examining the route. Other speculations occupied the attention of the public; and this project slept until the latter part of January, 1851, when several meetings were held at San José, and an able address, drawn up by the Rev. B. BRIERLY, was printed and distributed. Subscriptions were made to the stock, but could not be made effective, owing to prominent defects in the law relating to corporations. These were remedied by the passage of the general railroad law of 28th April, 1851.

In conformity with the provisions of the new law, subscriptions were made for stock to the amount of \$55,000, and ten per cent. was actually paid in to the treasury.

On the 6th September, 1851, the Company was regularly organized, with the name of THE PACIFIC AND ATLANTIC RAILROAD COMPANY, and the following gentlemen were elected Directors: DAVIS DIVINE, E. O. CROSBY, W. D. M. HOWARD, DANIEL MURPHY, SAMUEL J. HENSLEY, JAMES ALEXANDER FORBES, JAMES C. COBB, PETER I. DAVIS, PETER VAN CANEGHEM, SHERMAN DAY, JOSEPH C. PALMER, and JOSEPH ARAM.

Messrs. WM. D. M. HOWARD, SAMUEL J. HENSLEY, JOSEPH C. PALMER, JAMES C. COBB and CHARLES WHITE were elected Commissioners for opening books of subscription to the stock. By the Board of Directors, DAVIS DIVINE was elected President,

JAMES A. FORBES, Vice President, SAMUEL J. HENSLEY, Treasurer, CHARLES E. ALLEN, Secretary, and WM. J. LEWIS, Chief Engineer.

With the funds paid in, amounting to about \$5500, a survey of the route was made under the superintendence of the Chief Engineer, the results of which were embodied in his report, illustrated by a map and profile, published about the close of the year 1851. In the mountainous portion of the county of San Francisco, several different lines were carefully examined, and the present location was selected with the full conviction that it was not only far preferable to all the others, but that no other route existed, within twelve miles of the city, which was at all practicable, within the bounds of a reasonable expense.

While the survey was going forward, Judge DIVINE was occupied in soliciting the right of way, for which a few deeds were given at that time.

After the distribution of the Engineer's report, the Commissioners opened the books for subscription to the remainder of the stock, both at San Francisco and at San José, but no one subscribed. Several attempts were made to negotiate for subscriptions, through the agents of large banking houses in New York and England, but without success. The answer uniformly returned to these applications was, that a portion of the road must be actually constructed by means of capital raised at this point; and that when such portion of the road should be known to be paying an income, it would form a basis for a loan or subscription from abroad; but without such preliminary basis it would be useless to expect foreigners or Eastern capitalists to invest. Some aid was looked for from Congress in the way of grants of land, but, although a bill for that purpose was passed through one branch, it failed on its final passage, and nothing more has been obtained thus far from that source than the grant of the right of way under the general law of August 4th, 1852.

The affairs of the company remained in a dormant state until late in the summer of 1853. The Legislature having, by the Act of 22d April, 1853, essentially modified the general railroad law, and the time limited by law for the commencement of the actual construction of the road being about to expire, it was deemed advisable to reorganize the Company under the

provisions of the new law. A sufficient number of subscriptions from the former subscribers were obtained to satisfy the requirements of the new law, and the amended articles of association were filed in the Secretary of State's office on the 29th October, 1853. By these articles the entire capital stock was augmented from \$1,250,000, to \$2,000,000.

Not long after this, MESSRS. PALMER, COOKE & Co., C. K. GARRISON, JOHN M. HORNER and E. L. BEARD, who claimed and held interests in large tracts of land adjoining the city of San Francisco and the Mission Dolores, with a view of enhancing the value of their property, came forward and subscribed to all the remaining stock of the Company, amounting to 19,450 shares. No installment was paid in at the time of subscription. The Commissioners for procuring subscriptions to the stock closed the books, declared all the stock taken, and called a meeting of the stockholders, as provided for by law to choose Directors. The stockholders met at San José on the 2d Jan'y, 1853. The old Board of Directors also met at the same time, when, Mr. PALMER having resigned his office of Stock Commissioner, and CHARLES WHITE being deceased, the Board appointed MESSRS. C. T. RYLAND and SHERMAN DAY to fill their places. The stockholders elected JOSEPH C. PALMER, Esq., President, and MESSRS. WM. D. M. HOWARD, GEO. W. WRIGHT, C. K. GARRISON, CHARLES HOPKINS, JOHN M. HORNER, E. L. BEARD, E. O. CROSBY, S. J. HENSLEY, C. T. RYLAND, JOHN YONTZ, DAVIS DIVINE, PETER I. DAVIS and CHARLES R. BOND, as Directors. Mr. Day had previously been engaged in preparing maps and soliciting grants of the right of way.

As the new general railroad law was found to contain defects that would render it impracticable for any company to work under it, Judge DIVINE and HUGH O'NEAL, Esq., as Counsel, drew up a set of amendments, which were passed with some modifications, by the Legislature of 1854. Considerable expense was incurred in preparing and procuring the passage of these amendments, but their value in facilitating the practical working of our company, as well as of all similar companies in the State, is far greater than their cost.

The actual prosecution of the work was now dependent upon the will of the four large stockholders, who were not ready to go on with it until certain land titles should be adjusted and

confirmed. The other stockholders, as well as citizens interested, became impatient of this delay, and at a meeting of the Directors on the 2d of June, 1854, an installment of one-half of one per cent. was ordered to be paid on or before the 1st July, and two per cent. on or before the 1st August, on all stock on which no installments had previously been paid. In answer to this call, MESSRS. PALMER, COOKE & Co. paid a portion of the one half per cent. installment and expressed a willingness to pay the remainder of both installments as fast as the other stockholders would pay theirs. Mr. BEARD had already paid a portion of the one-half per cent. installment for incidental expenses of the Company, but paid no more after the call. MESSRS. GARRISON and HORNER paid nothing on either installment.

At a meeting of the Board of Directors, on the 11th November, 1854, the prescribed formalities having been observed, it was resolved "that all the stock on which the installments of 2 1-2 per cent. as ordered on the 2d June had not been paid be, and the same is hereby declared forfeited, and that the Secretary be directed to enter such forfeited stock in the Book of Stockholders;" and also — "that the Secretary transmit to each delinquent subscriber of the forfeited stock a list of the accounts existing against the Company and demand payment of the same."

In addition to the forfeiture of the stock as ordered by the Directors, MESSRS. PALMER, COOKE & Co. have signed a relinquishment of all their large subscription, except \$10,000 which they propose to retain as new subscribers. Mr. GARRISON has signed a similar relinquishment retaining a subscription of only \$5000. Mr. HORNER has signed a similar relinquishment, and there is no reason to doubt that Mr. BEARD will do the same so soon as he can be applied to.

At the meeting of Directors on the 11th November, WM. D. M. HOWARD, Esq., having sent in his resignation as a Director, I. C. WOODS, Esq., of the house of ADAMS & Co., was appointed to fill the vacancy. MESSRS. CROSBY, BOND and WOODS were appointed Commissioners to solicit new subscriptions in place of the forfeited stock, with an injunction that no new subscription should be received without a payment of five per cent. in cash at the time of subscribing. The Commissioners also adopted the rule, for the present, of not receiving from any one



person a larger subscription than \$10,000, so that all who wished might have an opportunity of subscribing, and that no grounds of jealousy might exist, lest one or two individuals should monopolize the control of the Company. The subscriptions thus far obtained have been in sums of from \$1000 to \$10,000 from some of the most responsible and judicious business men of San Francisco. At the annual meeting of stockholders to be held on the 1st January, 1855, for the purpose of electing Directors, the recently subscribed stock if subscribed previous to the 2d December, may be fully represented.

To sum up, in brief, the position of the Company at this point of its history, it presents the following results obtained : The Company has been organized according to the new law ; that law itself has been so amended as to make it more practicable. A careful survey, maps, and profiles, have been made under the superintendence of a competent Engineer, whose report is here attached. The right of way has been obtained for several miles, and much more has been promised as soon as the special maps for that purpose shall have been completed. The total amount of stock has been subscribed, thus enabling the Company to complete its permanent organization in compliance with the law. The forfeiture of a part of the stock has placed it at the disposal of the Company. A valuable public square, containing nearly eight acres, in the city of San José, has been granted to the Company for the use of a dépôt, and the right of way from that square to the boundary of the city of San José has been secured. And, finally, a new and responsible subscription has been obtained, presaging the speedy commencement of the actual construction of the road.

SHERMAN DAY,  
*Secretary.*

SAN FRANCISCO, 14th December, 1854.

AN ACT *to provide for the incorporation of Railroad Companies.*

[Originally passed April 22, 1853 ; amended May 15, 1854.]

*The amendments are here incorporated with the text of the original law.*

*The People of the State of California, represented in Senate and Assembly, do enact as follows :*

SECTION 1. Any number of persons, not less than twenty-five, being subscribers to the capital stock of any contemplated railroad, either in this State or through any portion of the Territories of the United States contiguous to this State, may be formed into a corporation for the purpose of constructing, owning, and maintaining such railroad, of either single or double track, by complying with the following requirements : When an instrument, setting forth the road intended to be built, and the name of a person to act as Treasurer until articles of association have been adopted, and until a Treasurer has been duly elected, has been signed by not less than twenty-five persons as aforesaid, and when stock to the amount of at least one thousand dollars for every mile of the road so intended to be built, shall be in good faith subscribed, and ten per cent. paid thereon to the Treasurer named in said instrument ; then (the said Treasurer having given notice in writing to all such subscribers, of a meeting to be held not less than twenty days after the date of such notice,) the said subscribers, either in person or by written proxy, may adopt articles of association, and may elect from among the subscribers to said articles, thirteen Directors for said company.

SEC. 2. The said articles of association shall set forth the name of the corporation, the number of years the same is to continue, (which shall not exceed fifty years,) the amount of the capital stock of the company, (which shall be divided into shares of one hundred dollars each, and which shall be the actual cost of constructing the road, together with the cost of the right of way, motive power, and every other appurtenance for the completion and running of said road, as nearly as can be estimated by competent engineers,) the names of the Directors

to manage the concerns of the company, subject to the restrictions hereinafter specified, who shall hold their offices until others are elected, the place from and to which the proposed road is to be constructed, and each county into and through which it is intended to pass, and its length as near as may be, and the names of five Commissioners to open books of subscription to the stock, which Commissioners shall be subscribers to said articles of association.

SEC. 3. Each subscriber to such articles of association shall personally subscribe thereto his name, place of residence, and number of shares of stock taken by him in such company, and the said articles being so subscribed by not less than twenty-five persons may, after the provisions of section four are complied with, be filed in the office of Secretary of State, and thereupon the persons who have so subscribed, and all persons who shall from time to time become stockholders in such company, shall be a body corporate, by the name specified in such articles, and shall be capable in law to make all contracts, acquire real and personal property, and possess all the powers and privileges for the purpose of carrying on the business of the corporation that private individuals and natural persons now enjoy; and all deeds and conveyances made by such company shall be signed by the President, under the seal of the corporation.

SEC. 4. When the amount of stock specified in the first section of this act shall have been subscribed, and ten per cent. on said amount shall have been actually and in good faith paid in cash, to the Treasurer appointed by the Directors named in such articles, and when there shall be endorsed on said articles, or annexed thereto, an affidavit made by at least three of the said Directors that said amount of stock has been subscribed, and that said ten per cent. has been actually paid in as aforesaid, and that the subscribers to the said articles are all known by one or the other of the said three Directors to be subscribers thereto, and to be the persons so represented; then the said articles of association may be filed in the office of the Secretary of State.

SEC. 5. The Directors named in the articles of association shall organize as a Board immediately after their election, notice in writing of the time and place of such meeting having first been given by the Treasurer to each Director, and at such

meeting they shall appoint a President from among the Directors, and a Secretary, and a Treasurer, who shall be officers of the company as well as of the Board of Directors, and hold their respective offices until their successors have been duly qualified. The Secretary and the Treasurer, before they enter upon the performance of their duties, shall each give a bond, with sufficient surety for the faithful performance of their respective duties, which bond and sureties shall be approved and accepted by the Board of Directors. The temporary Treasurer required by the first section, shall pay over all moneys received by him as such Treasurer, to the Treasurer appointed by the Board of Directors, so soon as the latter has been qualified. The Board of Directors shall name, and give notice thereof to all the Commissioners, in two or more newspapers of this State in which notices of the time and place of all meetings of the company shall be published prior to any such meeting, until after the Directors provided for in section eleven shall have been elected: Provided, in selecting such newspapers, those published in the counties into or through which the contemplated railroad may run, shall be preferred.

SEC. 6. Should the entire capital stock not be subscribed within one year from the date of the articles of association, a new Board of Directors shall be elected by the stockholders at the first regular meeting thereafter of the company, notice of such intended election having been given as hereinafter provided in section eleven; and the Directors so elected shall have the same powers and the same duties as their predecessors in office.

SEC. 7. A copy of any articles of association filed in pursuance of this act, with a copy of the affidavit aforesaid endorsed thereon or annexed thereto, and certified to be a copy by the Secretary of State, shall, in all courts and places, be presumptive evidence of the incorporation of such company, and of the facts therein stated, and such a copy, so certified, shall be kept in the office of the Secretary of the corporation, subject to examination, during office hours, by any person.

SEC. 8. Said articles of association may, at any time before the capital stock is fully subscribed for, be altered, modified, or changed, by filing with the Secretary of State new articles of association subscribed by two-thirds in numbers, and also in amount of the stockholders and stock in such company, at the



time the said new articles are adopted: Provided, there is endorsed upon the said new articles, or attached thereto, an affidavit made by the Secretary of the company that he is the acting Secretary of such company, and that the names of two-thirds in numbers and amount of stockholders and stock, at the date of said affidavit, are subscribed to said new articles by such stockholders, which said affidavit shall be made before the County Clerk of the county in which the office of the Secretary of the company may be located. As soon as such new articles, with such an affidavit endorsed thereon, or attached thereto, have been filed as aforesaid, the corporation shall be conducted under the new articles, in the same manner as though the original articles had contained all the provisions of the new articles; and from and after the date of the filing of said new articles as aforesaid, the original articles shall be null and void. But the duration of the corporation shall not be extended by any new articles beyond fifty years after the date of the original articles; and the new articles shall not so change the character of the company as to make it other than a company incorporated for railroad purposes, according to the provisions of this act: Provided, should any portion of the stockholders object to the filing of new articles as aforesaid, the company shall be liable for, and pay to each of the stockholders objecting, who may demand it, the several assessments they may have previously paid upon their several shares, and such shares, from and after the re-payment of the assessments by the company, shall belong to the company.

SEC. 9. The Directors acting previous to the subscription of the entire capital stock, shall have no power, as such, to incur a debt or debts that shall be valid against the company, nor to assess the stockholders to an amount exceeding in all ten per cent. on their several shares.

SEC. 10. The Commissioners for opening books of subscription named in the articles of association, (any vacancy in their number being filled by the Board of Directors,) shall, within one month after the company shall be incorporated, and from time to time thereafter, open books of subscription to the capital stock of the company, in such places in this State or elsewhere, as they or the Board of Directors may designate, after giving such notice as a majority of said Commissioners shall direct,

which books may be kept open until all the capital stock shall be subscribed, if the corporation shall so long exist. The said Commissioners, if so ordered by the Board of Directors, shall require each subscriber, at the time of subscribing, to pay such uniform assessment on each share subscribed for, as may be ordered by the said Board. The said Commissioners shall, also, from time to time, as may be ordered by the Directors, deposit all money received by them from subscribers, with the Treasurer of the corporation, taking his receipt therefor. The Commissioners shall close the books whenever informed by the Secretary of the company that new articles have been ordered to be filed, and shall keep them closed until notified by the Secretary that such order has been either executed or repealed. They shall also close the books conditionally, whenever they may believe that the whole capital stock has been subscribed; the said books to be reopened, in case it shall appear upon examination, that the entire capital stock has not been already subscribed. And in case a greater amount of stock shall be subscribed than the whole capital stock of such company, the Commissioners shall distribute such capital stock as equally as possible among the subscribers in proportion to the subscriptions; but no share shall [be] divided in making such distribution, nor shall a greater number of shares be allotted to any subscriber than such subscriber shall have subscribed for.

SEC. 11. As soon as practicable, not exceeding six months after such capital stock shall have been subscribed, the Commissioners to receive subscriptions thereto shall distribute the same as aforesaid; shall appoint a time and place for the meeting of the stockholders to choose Directors; select newspapers for the publication of notices, and transact other business. Such meeting shall be held in one of the counties in or through which said railroad is proposed to be constructed, and notice thereof shall be given by said Commissioners, by public notice, to be published not less than twenty days previous thereto, in two or more newspapers published in said counties into or through which said road is proposed to run, if there are newspapers published in either of said counties, if not in two or more newspapers published in the next adjoining counties. Not less than nine nor more than thirteen Directors shall be chosen at such meeting, by ballot, and by a majority of the votes of the

stockholders being present in person or by proxy. And every such stockholder being present in person or by proxy at such election, or any subsequent election of Directors, shall be entitled to give one vote for every share of stock which he shall have owned for thirty days next preceeding such election, but no stockholder shall vote at any such election upon any stock except such stock as he shall have owned for such thirty days. No person shall be Director unless he shall be a stockholder, owning such stock absolutely in his own right, and qualified to vote for Directors at the election at which he shall be chosen, nor unless he shall be a resident in this State; and at least three of the Directors shall, at the time of their election, be residents of the counties in or through which the route of said railroad shall run, and at least nine of the Directors shall be citizens of the United States. The Directors thus chosen shall be Directors for one year, and until others are duly elected in their places. The Commissioners mentioned in the last preceding section shall be inspectors of the first election of Directors, shall openly count the votes and declare the result, and shall, within ten days thereafter, file a certificate thereof, subscribed by them, or a majority of them, in the office of Secretary of State, and in the office of the Clerk of each county in or through which such railroad shall be proposed to be constructed, and shall also deliver to the Treasurer of said company all moneys received by such Commissioners on subscription to such capital stock not already paid over to the Treasurer; and they shall also deliver to the Directors declared by them to be elected, all books and papers relating to such subscription or belonging to said company, in the possession of said Commissioners. Subsequent elections shall be held annually, at such time and place in one of the counties into or through which such railroad shall pass, as shall be directed by the by-laws of the company. In case it shall happen at any time that an election of Directors shall not be made on the day designated by the by-laws of said company when it ought to have been made, the company for that reason shall not be dissolved, if within ninety days thereafter they shall hold an election for Directors in such manner as shall be provided by such by-laws. At all meetings of the stockholders when two-thirds of all the shares that may have been previously subscribed are represented in person or by

proxy, those so representing the same shall constitute a quorum for the transaction of business. Should the Commissioners fail to perform their several duties as set forth in this and the foregoing section, said Commissioners, or any of them, may be removed by the Board of Directors, who may elect others in their places by a two-thirds vote of said Board, notice of the meeting for such purpose having been first given by the Secretary of the company not less than ten days previous thereto, in one or more of the newspapers provided for in section five of the Act to which this is amendatory.

SEC. 12. There shall be a President and Vice President of the company, who shall be chosen by and from the Directors. The Directors shall also elect or appoint a Secretary, a Treasurer, and such subordinate officers as the company, by its by-laws, may designate. The said officers shall be chosen at such times and for such terms, and they shall be required to give such security for the faithful performance of the duties of their respective offices as the company, by its by-laws, may require: and any such officers may be removed from office by the Board of Directors, by a four-fifths vote of said Board, and the vacancy filled by said Board for the remainder of the term of office.

SEC. 13. It shall be lawful for the Directors to call in and demand from the stockholders, respectively, all sums of money by them subscribed, at such times, and in such payments or installments as the Directors shall deem proper, under the penalty of forfeiting the shares of stock subscribed for, and all previous payments made thereon, if payment shall not be made by the stockholders within sixty days after a personal demand, or after notice requiring such payment shall have been published for the same period, in such newspapers as may be designated by the company, at the meetings required in section eleven; and no transfer of any share after such notice has been published, shall exempt such share from forfeiture; should the installment on the same not be paid within the sixty days above limited, a declaration of every such forfeiture shall be made by the Directors, and the Secretary shall then make an entry to that effect in the "Book of Stockholders," as hereinafter provided.

SEC. 14. The Directors of such company shall have power to fill all vacancies in their own body, occasioned by death, resignation, or any other cause, and to make such by-laws as



they may think proper for the transfer of the stock and the management of the property and business of the company, of every description whatsoever, and for prescribing the duties of officers, artificers and employees of said company, and for the appointment of all officers, and the carrying on of all business within the scope and power of said company; Provided, that such by-laws be not inconsistent with the laws of this State, or of the United States, or with the articles of association, or with the by-laws adopted by the stockholders of the company.

SEC. 15. Such companies, after at least ten per cent. on all their capital stock has been paid in cash into the treasury of the corporation, shall have power to borrow, from time to time, on the credit of the corporation, and under such restrictions as two-thirds in interest of the stockholders may impose, such sum or sums of money not exceeding in all the amount of its capital, as may be necessary for the construction and equipment of their road, at a rate of interest not exceeding ten per cent. per annum, and to execute bonds or promisory notes therefor in sums of not less than one thousand dollars in any one note or bond, and to secure said notes or bonds may mortgage their corporate property and franchises, and pledge the income of the company. Should any debt or contract be made not in accordance with the above mentioned provisions, the Directors under whose administration the same may have happened, except those who may have caused their dissent therefrom to be entered at large on the minutes of the Board of Directors at the time, and except those who were not present when the same did happen, shall, in their individual and private capacities, be liable, jointly and severally, to the said corporation, or to any of the creditors thereof, for the full amount of such debt or contract, and shall moreover be deemed guilty of a misdemeanor, and upon conviction before any court having competent jurisdiction, be fined any sum not exceeding ten thousand dollars, or imprisoned in the county jail any time not exceeding one year, or both, at the discretion of the court.

SEC. 16. Any company incorporated under this act may, by complying with the provisions herein contained, increase or diminish its capital stock to any amount which may be deemed sufficient and proper for the purpose of the corporation; but before any corporation shall be entitled to diminish the amount

of its capital stock, if the amount of its debts and liabilities shall exceed the sum to which the capital is proposed to be diminished, such amount shall be satisfied and reduced, so as not to exceed the diminished amount of capital. Whenever it is desired to increase or diminish the amount of capital stock, a meeting of the stockholders may be called by a notice signed by at least a majority of the Directors, and published for at least four weeks in such newspapers as have been selected according to the provisions of section eleven of this Act, which notice shall specify the object of the meeting, the time and place where it is to be held, and the amount to which it is proposed to increase or diminish the capital; and a vote of two-thirds of all the shares of stock shall be necessary to an increase or diminution of the amount of the capital stock.

SEC. 17. The Directors shall also cause to be kept a book, to be called "Record of Corporation Debts," in which the Secretary shall record all the debts and contracts of the Directors, the amount thereof, and with whom made; which book shall at all times be open to the inspection of any stockholder. When any debt or contract shall be paid or discharged, the Secretary shall make a memorandum thereof in the margin of the record where the same is recorded.

SEC. 18. The Secretary of the corporation, who may be elected by the Directors named in the articles of association, and every succeeding secretary elected during the continuance of said corporation, shall keep in a book, provided for that purpose, a correct record of the proceedings at each meeting of the company, as well as of the Board of Directors; such record showing the name of each Director present at the opening of each meeting of the Board, and at what stage of the proceedings any Director previously absent may appear, and also at what stage of the proceedings any Director may obtain leave of absence. The record shall also show the name of each Director voting against any proposition, whenever any Director may require the same to be placed upon the record. Prior to the adjournment of each meeting of the company, or of the Board of Directors, the record of the proceedings of such meeting shall be read, amended if necessary, and approved by such company or such Board.

SEC. 19. The Secretary of the corporation shall also keep a

book to be provided for that purpose, to be labelled "Book of Stockholders," which shall contain the names of all persons, alphabetically arranged, who are, or who shall within six years have been stockholders of said company, and showing their places of residence, the number of shares of stock held by them respectively, the time when they respectively became the owners of such shares, the amount of stock actually paid in by them respectively, as also the time when any may have ceased to be stockholders; which book, during the usual business hours of the day, on every day, except Sunday, the Fourth of July, Thanksgiving, Christmas and New-Years' days, shall be open for the inspection of stockholders and creditors of the company, and their personal representatives, at the office of the Secretary of the company; and any and every such stockholder, creditor or representative shall have a right to make extracts from such book; and no transfer of stock shall be valid for any purpose whatever, except between the parties thereto, until it shall have been entered therein, by any entry showing to and by whom transferred, the numbers and designation of the shares, and the date of the transfer; and no abandonment of shares by the owners thereof, or forfeitures of shares by order of the Board of Directors, shall be valid until both the fact and date of such abandonment or such forfeiture has been entered in said book; and said book shall be presumptive evidence of the facts therein stated. On the failure or neglect of the Secretary to make any proper entry in such book, or refusal, or neglect to exhibit the same, or allow the same to be inspected, and extracts to be taken therefrom, he shall be liable to trial by the Board of Directors for misdemeanor in office, and he shall also be liable to trial for damages, before any Court of Justice having jurisdiction according to the damages alleged.

SEC. 20. The stock of such company shall be deemed personal estate, and when certificates of the ownership of shares are issued, the shares may be transferred by endorsement and delivery of the certificates thereof, such endorsement being by the signature of the proprietor or his attorney or legal representative; but such transfer shall not be valid except as between the parties thereto until the same shall have been entered in the book of stockholders, as provided in the nineteenth section; the entry of transfer to be made in said book by written order, either of

the stockholder himself or of his legal representative, or of a Probate or Civil Court: prior to the issuing of certificates of stock, the shares may be transferred by a delivery of receipts for installments paid, and by an entry as aforesaid in the book of stockholders. When certificates of stock are issued, each certificate shall show upon its face the amount of money paid on the share represented by such certificate ; for the purpose however of providing means for the payment of its debts, and for the construction of its road, materials or equipments, such company may issue a preferred stock to an amount not exceeding one-half of the amount of its capital stock, with such priority over the remaining stock of such company, in the payment of dividends, as the Directors of such company may determine, and shall be approved by a two-thirds of the stockholders in interest.

SEC. 21. Any stockholder transferring his shares or abandoning them, by an entry to that effect in the aforesaid book of stockholders, (all previous calls or assessments having been fully paid on said shares so abandoned,) as also any stockholder forfeiting his shares by order of the Board of Directors, entered in said book of stockholders, shall, from and after the date of entry of such transfer, abandonment or forfeiture, cease to be a stockholder in such company, and he shall not be liable to any future calls from the Directors, nor for any debts that may be contracted by said corporation after said entry has been made ; but this shall not release him from his proportion of debts and liabilities contracted by the corporation prior to said entry ; but each stockholder of said corporation shall be individually liable to the creditors of such corporation for his proportion of all the debts and liabilities of such company, (except as above provided,) *Provided*, That in no case contemplated in this Act or the Act to which this is amendatory, can the private property of a stockholder be levied upon for the payment of corporate debts while corporate property can be found with which to satisfy the same ; but it will be sufficient proof that no corporate property can be found if an execution has issued on a judgment against the corporation, and a demand thereon made of some one of the last acting officers of the corporation for property on which to levy ; but if he neglects or refuses to point out any such property, the defendant or any stockholder, in any stage of the cause, may point out corporate property, subject to levy, and upon his satisfying the



Court of the existence of such property, by affidavit or otherwise, the cause shall be continued, or execution against the defendant stayed, until the property of the corporation can be levied upon and sold. The court may subsequently render judgment and order execution against the defendant for his proportion of any balance which may be found due after exhausting the corporate property, according to the stage of the cause when such application is made to the court. When the private property of a stockholder is taken for a corporate debt, he may maintain an action against the corporation for indemnity, and against any of the stockholders for contribution.

SEC. 22. The President, and a majority of the Directors, within thirty days after the payment of the last installment of the capital stock, so fixed and limited by the company, shall make a certificate stating the amount of the capital so fixed and paid in, which certificate shall be signed by the President and a majority of the Directors and sworn to by the President, and they shall, within the said thirty days, file and record the same in the office of the Secretary of State.

SEC. 23. If the Directors of the company shall declare and pay any dividend when the company is insolvent, or any dividend the payment of which would render it insolvent, they shall be jointly and severally liable for all the debts of the company then existing, and for all that shall be thereafter contracted, so long as they respectively remain in office. Provided, that if any of the Directors shall be absent at the time of making the dividend, or shall cause their dissent therefrom to be entered at large on the minutes of the said Directors at the time, they shall be exempt from the said liabilities.

SEC. 24. If the officers of the company shall make a false certificate, or report, or publish a false notice, for the purpose of deceiving or defrauding the stockholders, or the public, in relation to the concerns and affairs of the company, all the officers who shall have ordered or joined in the same, shall be jointly and severally liable for all the debts of the company contracted while they are officers thereof.

SEC. 25. No person holding stock in such company as executor, administrator, guardian or trustee, and no person holding such stock as collateral security, shall be personally subject to any liability as stockholders of such company; but the person

pledging such stock shall be considered as holding the same, and shall be liable as a stockholder accordingly, and the estates and funds in the hands of such executor, administrator, guardian or trustee, shall be liable in like manner to the same extent as the testator or intestate, or the ward or person interested in such trust fund would have been if he had been living and competent to act, and hold the same stock in his own name.

SEC. 26. Every such executor, administrator, guardian or trustee shall represent the stock in his hands at all meetings of the company, and may vote accordingly as a stockholder, and every person who shall pledge his stock as aforesaid, may, nevertheless, represent the same at all such meetings, and may vote accordingly as a stockholder.

SEC. 27. Every such corporation shall have power, First, To cause such examinations and surveys for the proposed railroad to be made as may be necessary to the selection of the most advantageous route for the railroad, and for such purpose, by their officers, agents, and servants, to enter upon lands or waters of any person or persons, subject to responsibility for all damage which they shall do thereto. Second, To receive, hold, take, and convey such voluntary donations of real estate and other property as shall be made to aid and encourage the construction of said road. Third, To purchase, and by voluntary grants and donations receive and take, and by its officers, engineers, surveyors and agents, enter upon and take possession of, and hold, and use in any manner they may deem proper, the same as a natural person might or could do, all such lands, and real estate, and other property, as the Directors may deem necessary for the construction and maintenance of said road, and for the stations, depots, and other accommodations and purposes deemed necessary to accomplish the objects of the company. Fourth, To lay out its road or roads, not exceeding nine rods wide, and to construct and maintain the same with a single or double track, with such appendages as may be deemed necessary for the convenient use of the same, and, for the purpose of cutting embankments and procuring timber, stone, and gravel, may take as much more land as may be necessary for the purposes aforesaid, in the manner hereinafter provided for the proper construction and security of the road. Fifth, To construct their road across, or upon any stream of water, water course, roadstead, bay, navigable

stream, or highway, railroad, or canal, which the route of its road shall intersect or cross; but the corporation shall restore the stream, or water course, road, or highway, railroad or canal, thus intersected, to its former state as near as practicable, so as not to impede its usefulness.

SEC. 28. Until otherwise provided by law, any company organized under this act, may enter upon, take possession of, and use all such real estate and property as may be required for the construction and maintenance of a single or double track railroad, and the convenient accommodations appertaining to the same, by complying with the following provisions: Whenever the said corporation shall not have acquired by gift, or purchase, any land, real estate, or property so required as aforesaid, or which may be affected by any operation connected with such construction and maintenance, it shall be lawful for the company, (by a petition signed by its attorney, or agent, describing with convenient accuracy and certainty, by map or otherwise, the lands, real estate, or property, so required to be taken or to be affected, setting forth the name and residence of each owner, or other person interested therein as owner, claimant, tenant, lessee, or incumbrancer, as far as known to such attorney or agent, or appearing of record,) to apply to the Judge of the District Court, either in term time or vacation, of the county where the said lands, real estate, or property shall lie, praying the appointment of commissioners to ascertain the compensation to be made to such owners and persons interested, for the taking or injuriously affecting such lands, real estate, or property as aforesaid. The Judge shall have satisfactory evidence that notice of an intended application, and the time and place thereof, for the appointment of Commissioners of Appraisement between said corporation and the owners and persons interested in such lands, real estate, and property, had been given, at least five days previously, to every such owner personally, or to some person of suitable age, at the residence or on the premises of such owner, or by publication thereof in a newspaper printed in the county in which such land, real estate or property may lie; such publication to be allowed only in respect to owners who shall appear, by affidavit, to have no residence in the county, known to such agent or attorney, whereat such notice could be delivered as aforesaid. The Judge may adjourn such proceedings from time



to time when necessary to the furtherance of justice, and may direct any further notice thereof to be given that may seem proper; and he shall hear the proofs and allegations of the parties interested, touching the regularity of the proceedings, and shall, by an entry in his minutes, appoint five competent and disinterested persons, Commissioners, to ascertain such compensation as aforesaid, specifying in such entry a time and place for the meeting of the Commissioners. The said Commissioners, before entering upon the duties of their office, shall be sworn, and any of them may administer oaths to witnesses produced before them, and they may adjourn from day to day, to enable the parties to procure testimony, but for no longer period than one day, without the consent of both parties, until the matter is finally determined, unless otherwise ordered by the said Judge for good cause shown. Whenever they shall have adjourned to enable the parties to procure testimony, any of the Commissioners may issue subpœnas and compel witnesses to attend. The Commissioners having heard the proofs and allegations of the parties, three or more of said Commissioners shall, after viewing the premises, without fear, favor, or partiality, ascertain and certify the compensation proper to be made to the said owners and parties interested, for the land, real estate, and property, so to be taken or injuriously affected as aforesaid, the valuation by said Commissioners to be of the said land, real estate, or property, as it was before the said railroad was projected, and not as improved in value by the projection of said road. The said Commissioners, or a majority of them, shall make, subscribe, and file with the Clerk of the county in which such lands, real estate, or property shall lie, a certificate of said ascertainment and assessment, in which the said lands, real estate, and property shall be described by map or otherwise, with convenient accuracy and certainty. Either party feeling aggrieved by the decision of the Commissioners, may appeal to the Supreme Court, as in other cases tried before the District Court: Provided, that such appeal shall not prevent the company from proceeding with their work, or retaining or taking possession of such lands, real estate and property, as may be necessary for the successful prosecution of their road. The Court or Judge, upon such certificate, and due proof that such ascertainment or assessment has been paid to the parties entitled to the same, or has been paid to the Clerk of the Court

of the proper county, shall make and cause to be entered in his minutes, a rule describing such lands, real estate, and property, in manner aforesaid, such ascertainment or assessment of compensation, with the mode of making it, and such payment or deposit of the same compensation as aforesaid. A certified copy of such rule shall be recorded and indexed in the proper Recorder's office in the like manner and with like effect, as if it was a deed of conveyance in fee simple from the said owners and parties interested, to the said corporation. Upon the entry of such rule, the said company shall become entitled to use and occupy all lands, real estate, and property described in said rule, as required to be taken as aforesaid during the continuance of the corporation, by this or any subsequent act; and may take possession of what they are not at the time in possession of, and hold and use all described in said rule for the purposes of said road, or otherwise for the benefit of the company, and shall thereupon be discharged from all claims for damages by reason of any matter specified in the said petition, certificate, or rule of court. If at any time after an attempted or actual ascertainment of compensation under this or any other Act, or any purchase by, or donation to the said corporation, of any lands for the purposes aforesaid, it shall appear that the title thereby acquired to all or any part of such lands for the use of said road, or of said corporation, shall fail or be deemed defective, the said corporation may proceed anew to perfect such title by procuring an ascertainment of the compensation proper to be made to any person or persons, whose title, claim, or interest in, or lien upon such lands, shall not have been compensated and extinguished according to law, and by making payment thereof, in the manner hereinafter provided, as near as may be, and at any stage of such new proceedings, or of any proceedings under this act, the Court, or Judge in Chambers, may, by a rule in that behalf made, authorize the said corporation, if already in possession, to continue in the use and possession, and if not in possession, to take possession of, and use such premises during the pendency and until the final conclusion of such proceedings, and may stay all actions or proceedings against such corporation on account thereof; Provided, such corporation shall pay a sufficient sum into court, or give approved security to pay the compensation in that behalf, when ascertained; and in every case where possession shall be

authorized, it shall be lawful for the owner or owners to conduct the proceedings to a conclusion, if the same shall be delayed by the said company. The said Commissioners shall be entitled to receive from said corporation their reasonable disbursements, and a compensation per day, to be fixed by said Court or Judge, not to exceed five dollars for each day actually employed by them in the discharge of their duties, such disbursements to be taxed and allowed by the Court or Judge. If any Commissioner so appointed shall die, be unable, or fail to serve, the Court or Judge may appoint another in his place, on reasonable notice of application for such an appointment, such application to be approved by the Court or Judge.

SEC. 29. In case any married woman, infant, idiot, or insane person, or any unknown owners not personally notified to appear, and who shall not appear, after such notice on the appointment of Commissioners, shall be interested in any such lands, real estate, or property, the Court or Judge shall appoint some proper person to appear before the said Commissioners, and act as attorney for and in behalf of said married woman, infant, idiot or insane person, unknown, or non-appearing owner, not personally served with notice.

SEC. 30. If at any time, after the location of the track of said road, in whole or in part, and the filing of the map thereof, it shall appear to the Directors of said company, that the line in some parts thereof may be improved, it shall be lawful for the said Directors, from time to time, to alter the line, and cause a new map to be filed in the office where the map showing the first location is, or shall be, filed, and may, thereupon, proceed to take possession of the lands embraced in such new location, that may be required for the construction and maintenance of said road on such new line, and the convenient accommodations appertaining to the same, and acquire the same, either by agreement with the owner or owners, or by such proceedings, as near as may be, as are authorized under the preceding sections of this Act, and use the same in place of the line, for which the new line is substituted.

SEC. 31. Whenever the track of a railroad shall cross a railroad or highway, such railroad or highway may be carried under or over the track, as may be found most expedient; and in case where an embankment or cutting shall make a change in



the line of such railroad or highway desirable, with a view to a more easy ascent or descent, the said company may take such additional lands for the construction of such road or highway on such new line, as may be deemed requisite by said Directors, unless the lands so taken shall be purchased or be voluntarily given for the purposes aforesaid; compensation therefor shall be ascertained in the manner in this Act heretofore provided, as near as may be, and duly made by the said corporation to the owners and persons interested in such lands; the same when so taken, on compensation made, to become part of such intersecting railroad or highway, in such manner and by such tenure as the adjacent parts of the same highway may be held for highway purposes.

SEC. 32. The right of way is hereby granted to all railroad companies that now are or hereafter may be organized under the provisions of this Act, to locate and construct their roads over and through any of the swamps or overflowed lands belonging to this State, or any other public lands which are now, or may be the property of this State, at the time of constructing said railroad, and the said companies are hereby authorized to survey and mark through the said lands of the State, to be held by them for the track of their respective railroads, one hundred feet in width for the whole length the said roads may be located over the lands of the State: Provided, That in cases where deep excavation or heavy embankment is required for the grade of such road, there, at such places, a greater width may be taken by said company, if necessary, not exceeding two hundred feet wide. And the right is hereby further granted to said companies to locate and occupy all necessary sites for watering places, depots and workshops along the line of said road or roads so far as the places convenient for the same may fall upon the lands belonging to this State: Provided, No such location shall be made upon any land belonging to the State within the limits of any incorporated city or town, or within five miles thereof, except upon paying to the State the full value for the same: and, Provided, That no one depot, watering place, or workshop, shall cover over one square acre each, and that said sites on the lands of this State shall not be nearer to each other than ten miles along the lines of said roads, and shall not be located upon State property within the limits of any city now incorporated;

and the right is hereby further granted to said companies to take from the lands belonging to this State all such materials of earth, wood, or stone, as may be necessary or convenient from time to time for the first construction of said road or roads, or any part thereof, through such lands: Provided, That the grants therein made, as well of the use of the lands of this State, as of the materials for the construction of said road or roads, shall cease and determine as respects each particular road which shall not have been begun and completed within the times limited in section forty-one of this Act: and, Provided further, That if any road at any time after its location shall be discontinued or abandoned by said company or companies, or the location of any part thereof be so changed as not to cover the lands of the State thus previously occupied, then the lands so abandoned or left shall revert to this State: and, Provided further, That when the location of the route of either of said railroads or sites for depots, watering places, or workshops, shall be selected, the secretary of said company shall transmit to the Surveyor General, and to the Comptroller of this State, and to the Recorder of the county in which the lands so selected are situated, to each of said officers, a correct plat of the location of said railroad or sites before such selections shall become operative. And when any such company shall, for its purposes aforesaid, require any land belonging to any of the counties, cities or towns in this State, the county, city and town officers respectively having charge of such lands, may grant such land to such company for a compensation which shall be agreed upon between them, or may donate the same; and if they shall not agree upon a sale and price, the same may be taken by the company as is before provided in other cases.

SEC. 33. When any such railroad shall be opened for use, it shall be unlawful for the corporation, its officers or employees, to charge more than ten cents per mile for each passenger, and fifteen cents per mile for each ton of freight. And for every transgression of such limitation the corporation shall be liable to the party suffering thereby treble the entire amount of fare or freight charged to said party.

SEC. 34. If any passenger shall refuse to pay his fare, it shall be lawful for the conductor of the train and the employees of the corporation to put him out of the cars at any stopping place the conductor shall select.



SEC. 35. Every such corporation shall start and run their cars for the transportation of passengers and property at regular times, to be fixed by public notice, and shall furnish sufficient accommodations for the transportation of all such passengers and property as shall, within a reasonable time previous thereto, offer or be offered for transportation at the place of starting and at the junctions of other railroads, and at stopping places established for receiving and discharging way passengers and freight, and shall take, transport and discharge such passengers and property at, from and to such places, on the due payment of freight and fare, established and authorized by said company or Directors thereof.

SEC. 36. In case of refusal by such corporation or their agents so to take and transport any passenger or property, that can reasonably and properly be carried, or to deliver the same when taken, within a reasonable time, such corporation shall pay to the party aggrieved all damages which shall be sustained thereby, with costs of suit.

SEC. 37. It shall be unlawful to place baggage or freight, or merchandize, or lumber cars, in the rear of passenger cars, and for any violation of the provisions of this section, the company shall be liable, upon complaint, to the party complaining, in the sum of five hundred dollars, and the person, agent, Director, or officer so causing the cars to be placed, shall be guilty of a misdemeanor, and upon conviction of such offence, shall be fined in any sum not exceeding five hundred dollars, or imprisonment in the county jail for three months, or both such fine and imprisonment; and should any accident happen to life or limb by such unlawful arrangement of cars, the person, agent, Director or officer who so directed or suffered such arrangement, shall be guilty of felony, and upon conviction thereof shall be imprisoned in the penitentiary for any term not less than three and not more than ten years.

SEC. 38. If any person shall, while in charge of a locomotive engine, running upon any railroad for such corporation, or while acting as the conductor of a car or train of cars on any such railroad, be intoxicated, he shall be guilty of a misdemeanor, and, on conviction thereof, shall be fined in any sum not exceeding one thousand dollars, or imprisoned in the county jail not exceeding six months.

SEC. 39. If any person shall wilfully do or cause to be done any act or acts whatever, whereby any building, construction or work of any such corporation, or any engine, machine, or structure, or any matter or thing appertaining to the same, or to the track of said road, shall be stopped, obstructed, impaired, weakened, injured, or destroyed, the person or persons so offending shall be guilty of a misdemeanor, and shall forfeit and pay to said corporation treble the amount of damages sustained by means of such offence, besides a fine not exceeding five hundred dollars, or imprisonment in the county jail not exceeding six months, or both such fine and imprisonment, in the discretion of the court.

SEC. 40. Every such corporation shall, within a reasonable time after their road shall be finally located, file in the office of the Secretary of State a map and profile of said road, and also a written statement specifying the line upon which it is proposed to construct the railroad, and the grades and curves of said road, and also a map of the lands taken or obtained for the use of said road; such maps and profile shall be drawn on a scale, and on paper to be designated by the chief engineer of said corporation, and shall be certified and signed by the President of said corporation, and by the chief engineer; on said maps and profile shall also be exhibited, by suitable lines, the boundaries of the several counties into or through which said railroad may run. A certified copy of said maps, profile and written statement, filed as aforesaid, shall be kept at the office of the Secretary of the corporation, and shall be open for examination at such time and to such persons as are specified in reference to the "Book of Stockholders" in the nineteenth section of this Act.

SEC. 41. If such corporation shall not, within two years after the filing of its original articles of association, begin the construction of its road, and expend thereon five per cent. on the amount of its capital, and finish the road and put it in full operation in six years, its act of incorporation shall be void.

SEC. 42. All railroads constructed under this Act of incorporation shall be constructed with iron rail known as the T rail, or the H rail, until otherwise provided by law.

SEC. 43. Any railroad company incorporated under any former act, may have the benefit of the provisions and limitations of this act by filing with the Secretary of State new articles of association, as set forth in section eight of this Act,

and the filing of such articles by such company, shall have the same effect upon the original articles of association of said company, as if said company had been originally incorporated under this Act: Provided, That any company already incorporated shall not have more than two years after the passage of this Act, to begin the construction of its road.

SEC. 44. The provisions of this Act shall extend and be applied to companies incorporated for the purpose of constructing roads on which to run prairie cars, so far as the same can be made applicable. The stockholders in car road companies shall not be less than eight, and the directors not less than three in number.

SEC. 45. All corporations that may be formed or organized under this Act, shall be subject to the provisions of Chapter One of an act entitled "An Act concerning Corporations," passed April twenty-second, one thousand eight hundred and fifty, so far as such provisions are not inconsistent with this act.

SEC. 46. An Act entitled "An Act to provide for the incorporation of Railroad Companies," passed April twenty-eighth, one thousand eight hundred and fifty-one, also an Act entitled "An Act supplemental to an Act entitled an Act to provide for the incorporation of Railroad Companies," passed twenty-eighth February, one thousand eight hundred and fifty-one, approved March twenty-second, one thousand eight hundred and fifty-two, are hereby repealed.

SEC. 47. When the franchise of any corporation under this Act, or any other railroad Act heretofore or hereafter passed, shall have been levied upon under an execution and sold, the corporators shall not have power to dissolve the corporation so as to destroy the franchise. And if they neglect to keep up an organization sufficient to enable the business to proceed, the purchaser or purchasers shall thereupon become vested with all the powers of the corporation requisite therefor. And when it becomes impracticable for one or more individuals so to exercise those powers, and in cases where doubts and difficulties not herein provided for arise, the purchaser or purchasers may apply by petition to the District Court of one of the counties into or through which said road may run; which court is hereby vested with authority to make any orders requisite for carrying into effect this Act and the Act to which this is amendatory in this respect.

## U. S. LAW GRANTING RIGHT OF WAY.

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*An Act to grant the Right of Way to all Rail and Plank Roads and Macadamized Turnpikes passing through the Public Land belonging to the United States.*

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the right of way shall be, and is hereby granted to all rail and plank road, or macadamized turnpike companies that are now or that may be chartered within ten years hereafter, over and through any of the public lands of the United States, over which any rail or plank road or macadamized turnpikes are or may be authorized by an act of the Legislature of the respective States in which public lands may be situated; and the said company or companies are hereby authorized to survey and mark through the said public lands, to be held by them for the track of said road, one hundred feet in width: Provided, That, in case where deep excavation or heavy embankment is required for the grade of such road, then at such places a greater width may be taken by such company, if necessary, not exceeding in the whole two hundred feet.

SEC. 2. *And be it further enacted,* That the said company or companies shall have the right to take from the public lands, in the vicinity of said road or roads, all such materials of earth, stone or wood as may be necessary or convenient, from time to time, for the first construction of said road or roads, or any part thereof, through said land.

SEC. 3. *And be it further enacted,* That there shall be, and is hereby granted to said company or companies, all necessary sites for watering places, depots, and workshops along the line of said road or roads, so far as the places convenient for



the same may fall upon the public lands: Provided, That no one depot or watering place shall contain over one square acre, and that said sites shall not be nearer to each other than ten miles along the line or lines of said road or roads: Provided further, That the said grants herein contained, as well of the use of the public lands, as of the materials for the construction of said road or roads shall cease and determine, unless the road or roads be begun within ten years from and after the passage of this act, and completed within fifteen years thereafter: And provided moreover, That, if any road, at any time after its completion, be discontinued or abandoned by said company or companies, the grants hereby made shall cease and determine, and said lands hereby granted, revert back to the general government: Provided further, That when a location for either of said railroads or plank roads, macadamized turnpikes, or sites for depots on the line of such road or roads shall be selected, the proper officers of such road or roads shall transmit to the Commissioner of the General Land-Office a correct plat of the survey of said road or roads, together with the survey of sites for depots before such selection shall become operative: Provided further, That none of the foregoing provisions of this act shall apply to, or authorize any rights in any lands of the United States other than such as are held for private entry and sale, and such as are unsurveyed and not held for public use by erection or improvements thereon.

Approved August 4th, 1852.

## ARTICLES OF ASSOCIATION.

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*Know all men* by these presents, that the undersigned, being subscribers to the stock of a contemplated rail road from the city of San José, in the county of Santa Clara, in the State of California, to the city of San Francisco in said State, amounting to at least one thousand dollars for every mile of the rail road intended to be built; and which said stock has been by them subscribed in good faith, and ten per cent. paid thereon, and being desirous of forming a corporation, do hereby adopt the following

### ARTICLES OF ASSOCIATION.

We, the undersigned, whose names are hereto subscribed, hereby organise, form and become a corporation and body corporate, under and in pursuance of the provisions of an Act entitled "An Act to provide for the Incorporation of Rail Road Companies," approved April 28th, 1851, for the purposes of constructing, owning and maintaining a rail road from the city of San José, in the county of Santa Clara, to the city of San Francisco; said corporation to be known by the style or name of "*The Pacific and Atlantic Rail Road Company*," to continue for the term of fifty years from the day of the date hereof.

The Capital stock of said corporation shall be and is hereby fixed at one million two hundred and fifty thousand dollars, being the actual cost of said road, right of way, motive power, and all other appurtenances, to run said road, as estimated by competent engineers; and shall consist of and be divided into twelve thousand five hundred shares, of one hundred dollars each.

The number of Directors to manage the concerns of said corporation shall be thirteen, and the names of the persons who



have been selected to act as the Directors of such corporation, and to hold their offices until others are elected, are Davis Divine, Elisha O. Crosby, William D. M. Howard, Daniel Murphy, Thomas O. Larkin, Samuel J. Hensley, James Alexander Forbes, James C. Cobb, Peter I. Davis, Peter Van Canighem, Sherman Day, Joseph C. Palmer and Joseph Aram.

The place from which the proposed rail road is to be constructed is some point in the city of San José, in the county of Santa Clara, and the place to which said rail road is proposed to be constructed is some point in the city of San Francisco, in the county of San Francisco; and the counties of Santa Clara and San Francisco are all the counties into or through which said railroad is intended to pass.

The length of said proposed railroad is, as nearly as the same can now be ascertained, fifty-three miles.

The five persons who have been selected, and are hereby designated as Commissioners to open books of subscription for the stock of the said corporation, are William D. M. Howard, Samuel J. Hensley, Joseph C. Palmer, James C. Cobb and Charles White.

In witness whereof we have hereunto severally subscribed our names and places of residence this sixth day of September, in the year of our Lord one thousand eight hundred and fifty-one.

<i>Names.</i>	<i>Residence.</i>	<i>No. of Shares.</i>
Davis Divine,.....	San Jose, California,.....	Twenty.
Chas. F. Willey,.....	" .....	Five.
Sherman Day,.....	" .....	Ten.
Wm. Daniels,.....	" .....	Twenty.
Elisha O. Crosby,.....	" .....	Twenty.
Peter I. Davis,.....	Santa Clara, .....	Ten.
James C. Cobb, .....	San Jose,.....	Twenty.
Joseph Aram, .....	" .....	Twenty.
Geo. W. Bellomy,.....	Santa Clara, .....	Ten.
Isaac Branham,.....	Pueblo,.....	Ten.
W. Campbell,.....	San Jose,.....	Twenty.
Sam'l. J. Hensley, .....	" .....	Twenty.
Daniel Murphy,.....	Santa Clara, .....	Ten.
P. Van Canighem,.....	San Jose,.....	Twenty.
C. E. Allen,.....	" .....	Five.
Jos. Buchanan,.....	" .....	Five.
Martha Williams,.....	" .....	Ten.
Peter Davidson,.....	" .....	Twenty.
Jackson Lewis,.....	" .....	Ten.
Josiah Belden, .....	" .....	Twenty.
John Yontz,.....	" .....	Five.
Chas. White,.....	" .....	Twenty.
Julian Hanks,.....	" .....	Ten.
Bassham & Wilson,.....	" .....	Twenty.

<i>Names.</i>	<i>Residence.</i>	<i>No. of Shares.</i>
James Alex. Forbes, .....	Santa Clara, .....	Ten.
Caswell Davis, .....	" .....	Five.
H. P. Dorsey, .....	" .....	Five.
S. C. Young, .....	San Jose, .....	Ten.
F. Lightston, .....	" .....	Twenty.
Carolán Mathers, .....	" .....	Five.
James Murphy, .....	" .....	Ten.
C. P. Hester, .....	" .....	Ten.
Martin Murphy, Jr., .....	Santa Clara, .....	Ten.
Jno. W. Whisman, .....	Santa Clara, .....	Ten.
Wm. D. M. Howard, .....	San Francisco, .....	Twenty.
Palmer, Cook & Co., .....	" .....	Twenty.
Willard Whipple, .....	San Francisquito, .....	Ten.
Zeri Hamilton, .....	Santa Clara, .....	Five.
Dennis Martin, .....	" .....	Twenty.
John M. Horner, .....	San Jose Mission, .....	Twenty.
E. L. Beard, .....	" .....	Ten.
R. G. Moody, .....	Brown's Redwood's, .....	Ten.

Subscribing witness as to the signatures of Martin Murphy, John W. Whisman, Wm. D. M. Howard, Palmer, Cook & Co., Zeri Hamilton, Dennis Martin, John M. Horner, E. L. Beard, R. G. Moody.

DAVIS DIVINE.

STATE OF CALIFORNIA,     }  
     *County of Santa Clara:* }

Be it known, that on the 6th day of September, A. D. 1851, before me, a Notary Public in and for the county of Santa Clara, duly commissioned and sworn, came Davis Divine, Charles F. Willey, Sherman Day, William Daniels, Elisha O. Crosby, Peter I. Davis, James C. Cobb, Joseph Aram, George W. Bellomy, Isaac Branham, W. Campbell, Samuel J. Hensley, Daniel Murphy, P. Van Canighem, C. E. Allen, Joseph Buchanan, Martha Williams, Peter Davidson, Jackson Lewis, Josiah Belden, John Yontz, Charles White and Julian Hanks, and they severally acknowledged to me that they executed the same freely and voluntarily, for the uses and purposes therein mentioned. And on the 10th day of September, A. D. 1851, before me came William R. Bassham, of the firm of Bassham & Wilson, James Alexander Forbes, Caswell Davis, H. P. Dorsey, S. C. Young, F. Lightstone, Carolán Mathers, James Murphy, C. P. Hester and William Whipple, and they severally acknowledged to me that they executed the same freely and voluntarily for the uses and purposes therein men-

tioned. And I further certify, that on the 4th day of October, A. D. 1851, before me came Davis Divine, to me personally known to be the person whose name is subscribed to the foregoing instrument as a subscribing witness, and being by me duly sworn, he did testify that he witnessed the execution of the foregoing instrument by the following named persons: Martin Murphy, John W. Whisman, William D. M. Howard, Joseph C. Palmer, of and for Palmer, Cook & Co., Zeri Hamilton, Dennis Martin, John M. Horner, E. L. Beard and R. G. Moody, and know them to be the persons described in and who executed the foregoing instrument, and they declared that they executed the same freely and voluntarily, and he subscribed his name thereto as a witness thereof.

{ L. S. } In witness whereof I have hereunto subscribed my name and affixed my seal of office, the 4th day of October, A. D. 1851.

DAVID P. BELKNAP, Notary Public.

STATE OF CALIFORNIA, }  
County of Santa Clara, } ss.

Personally appeared before me, a Notary Public in and for said county, Joseph Aram, James C. Cobb and Sam'l. J. Hensley, three of the Directors of the Pacific and Atlantic Rail Road Company, duly elected by the stockholders of said company, after having been severally duly sworn on their oaths, do say, that over one thousand dollars for each mile the proposed rail road abovementioned is to run, has actually and in good faith been subscribed to the stock of said road by the persons whose names appear subscribed to the foregoing Articles of Association, and that ten per cent. has actually and in good faith been paid to the Directors in cash, before the signing of said articles, to wit: that fifty-seven thousand dollars to said stock has been actually subscribed, and that five thousand and seven hundred dollars has actually and in good faith been paid to the Directors of said company in cash; and further deponents say not.

JAMES C. COBB,  
SAMUEL J. HENSLEY,  
JOSEPH ARAM.

{ L. S. } Subscribed and sworn to before me this 24th day of October, A. D. 1851. Witness my hand and official seal.  
DAVID P. BELKNAP,  
Notary Public.

**{ L. S. }**      Witness my hand and the seal of State, at the city  
                      of Benicia, this 29th day of Oct., A. D. 1853.  
  J. W. DENVER,  
  Secretary of State.

*Amended Articles of Association of the Pacific and Atlantic  
Railroad Company, to wit:*

Know all men by these presents, the undersigned, being subscribers to the stock of a contemplated rail road from the city of



San José, in the county of Santa Clara, and State of California, to the city of San Francisco, in the county of San Francisco, in said State of California, amounting, at least, to one thousand dollars for every mile of rail road intended to be built; and which said stock has been by them subscribed in good faith, and ten per cent. paid thereon, in gold and silver, and being desirous of forming a corporation, do hereby adopt the following

#### ARTICLES OF ASSOCIATION.

We, the undersigned, members and subscribers to the corporation and articles of association mentioned in the preamble to these articles, whose names are hereto subscribed, together with the others, original subscribers to the former articles, hereby organize, form, and become a corporation and body corporate, under and by virtue of the provisions of an act entitled "An Act to provide for the Incorporation of Railroad Companies," approved April 22d, 1853, for the purpose of constructing, owning and maintaining a rail road from the city of San José, in the county of Santa Clara, to the city of San Francisco, in the county of San Francisco, and State of California, said corporation to be known by the style and name of the "Pacific and Atlantic Railroad Company," to continue for the term of fifty years from the filing of the articles of association to which these are amendments.

The capital stock of said corporation shall be, and is hereby fixed at two millions of dollars, being about the cost of said road, right of way, motive power, and all other appurtenances to run said road, as estimated by competent engineers; and shall consist of and be divided into twenty thousand shares of one hundred dollars each.

The number of Directors to manage the concerns of said corporation shall be thirteen, and the names of the persons who have been selected to act as the Directors of such corporation, and to hold their offices until others are elected, are, Davis Divine, Elisha O. Crosby, William D. M. Howard, Daniel Murphy, Elias L. Beard, Samuel J. Hensley, James Alexander Forbes, James C. Cobb, Peter I. Davis, Peter Van Canighem, Sherman Day, Joseph C. Palmer, and Joseph Aram.

The place from which the proposed Railroad is to be construct-

ed, is some point in the city of San José, in the county of Santa Clara; and the place to which Railroad is proposed to be constructed, is some point in the city of San Francisco, in the county of San Francisco; and the counties of Santa Clara and San Francisco are all the counties into or through which said Railroad is intended (at present) to pass.

The length of said proposed Railroad is, as nearly as can now be estimated, fifty miles.

The five persons who have been selected, and are hereby designated as Commissioners to open books of subscription for the stock of the said corporation, are, William D. M. Howard, Samuel J. Hensley, Joseph C. Palmer, James C. Cobb, and Chas. White.

In witness whereof, we have hereunto severally subscribed our names and places of residence.

<i>Names.</i>	<i>Residence.</i>	<i>No. of Shares.</i>
Davis Divine,.....	San José,.....	Twenty.
James C. Cobb,.....	San José,.....	Twenty.
Samuel J. Hensley,.....	San José,.....	Twenty.
John Yontz,.....	San José,.....	Five.
Joseph Aram,.....	San José,.....	Twenty.
Isaac Branham,.....	San José,.....	Ten.
Jackson Lewis,.....	San José,.....	Ten.
F. Lightstone,.....	San José,.....	Twenty.
Jas. Alex. Forbes,.....	Santa Clara,.....	Ten.
C. E. Allen,.....	San José,.....	Five.
Wm. Daniels,.....	San José,.....	Twenty.
Ellen E. White, Admin- tratrix of Chas. White, deceased, }	San José,.....	Twenty.
J. C. Van Canigham,....	San José,.....	Twenty.
Elisha O. Crosby,.....	San José,.....	Twenty.
Palmer, Cook & Co.,.....	San Francisco,.....	Twenty.
W. Campbell,.....	San José,.....	Twenty.
Geo. W. Bellomy,.....	Santa Clara,.....	Ten.
Caswell Davis,.....	Santa Clara,.....	Five.
Peter I. Davis,.....	Santa Clara,.....	Ten.
Jno. W. Whisman,.....	Willow Grove, S. Clara Co.	Ten.
Isaac Branham, Execu- tor of the estate of Mar- tha Williams, deceased }	San José,.....	Ten.
R. G. Moody,.....	San José,.....	Ten.
Sherman Day,.....	San José,.....	Ten.
Jos. Buchanan,.....	San José,.....	Ten.
S. C. Young,.....	San José,.....	Ten.



<i>Names.</i>	<i>Residence.</i>	<i>No. of Shares.</i>
J. Hanks,.....	San José,.....	Ten.
Chas. F. Willey,.....	San José,.....	Five.
Martin Murphy, Jr.,.....	Santa Clara,.....	Ten.
W. R. Bassham,.....	San José,.....	Ten.
W. D. M. Howard, by his agent, Chas. R. Bond,	} San Francisco,.....	Twenty.

STATE OF CALIFORNIA, }  
County of Santa Clara, } ss.

I, Charles E. Allen, of the city of San José, in the county of Santa Clara, State aforesaid, having been first duly sworn, do depose and say, That I am the acting Secretary of the "Pacific and Atlantic Railroad Co.," mentioned in the articles of association hereto attached; and that the names of two-thirds in numbers, and amount of stockholders and stock, at this date, are subscribed to the new and amended articles of association of the "Pacific and Atlantic Railroad Company," by such stockholders; as will appear by reference to said articles, hereto attached, and the original articles of association, now on file in the office of the Secretary of State of this State, and further deponent saith not.

CHARLES E. ALLEN,  
Secretary of Pacific and Atlantic Railroad Co.

{ L. S. } Subscribed and sworn to before me, this 5th day of  
September, 1853.

H. C. MELONE, Clerk.

STATE OF CALIFORNIA, }  
Office of Secretary of State. }

This is to certify that the foregoing is a true copy of an original instrument, now on file, and filed in this office September 14, 1853.

{ L. S. } Witness my hand and the Seal of State, at the city  
of Benicia, this 29th day of Oct., A. D. 1853.  
J. W. DENVER,  
Secretary of State.

## BY-LAWS OF THE COMPANY.

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1. The officers of the Company shall be a President, a Vice-President, a Treasurer, a Secretary, and one or more Engineers.

2. The above offices shall be filled by the Directors by ballot.

3. Whenever a person holding the office of Director shall die, resign, or sell his stock, his office shall be vacant, and another competent stockholder shall be appointed by the Directors to fill the office so vacated.

4. All officers appointed by the Directors, shall hold their places during the pleasure of the Board.

5. There shall be an Executive Committee to consist of the President and four members of the Board, and a Finance Committee, to consist of three members of the Board. These Committees shall be appointed annually, and oftener if necessary.

6. The President shall have the general supervision of the affairs of the Corporation, and shall preside at all meetings.

7. The Vice-President shall preside in the absence of the President, and discharge all his duties while so absent, or during a vacancy in the office of President.

8. The Treasurer shall have the custody of the funds of the Association, and shall, under the direction of the Finance Committee, in the absence of instructions from the Board of Directors, take the general care of the same. He shall give such security as the Finance Committee may require.

9. There shall be certificates of stock issued, and the transfer of the same shall be by a surrender thereof, and by a proper transfer in the books of the Company, signed by such stockholder, or his properly authorized agent or representative.

10. The Executive Committee shall have the general power of advice and direction, when the action of the Board is not

specific, and detailed, and shall, when called upon, decide and direct in all matters.

11. The Engineer, or Engineers, shall conduct the surveys of the road, under the direction of the Executive Committee, and of the Board.

12. No transfer of stock in the Company shall be made for ten days next previous to any annual election of Directors, nor shall any such transfer be made for ten days next previous to the time appointed for any dividend to be declared on said stock.

13. The presence of a majority of the Directors shall be necessary to constitute a regular quorum. There shall be a stated annual meeting of the Directors at the time and place of holding the annual election.

14. The common seal of the Corporation shall be engraved with the name of the Company on the margin, or outer circle, with a Locomotive Engine in the centre.

15. It shall require the concurrence of a majority of the Board of Directors to alter, annul or enact a by-law of the Company.

16. The President may call a meeting of the Board of Directors whenever he may deem it necessary; and shall also call a meeting of the Directors whenever requested by any two Directors.

#### DUTIES OF TREASURER.

It shall be the duty of the Treasurer to receive and disburse, under the direction of the Board of Directors, or President and Executive Committee, all moneys belonging to the Company, and to keep regular and systematic accounts of all such receipts and disbursements; also, to render annually, (and oftener if required,) to the Committee of Finance, a full account of all his receipts and disbursements during each year, or for such time as required, with the vouchers in support thereof, and to make and prepare such an annual report to the Board of Directors as shall be required by the By-Laws, and to submit the same at the regular annual meeting. He shall also keep an account of stock held by the stockholders, and the amount paid thereon, as is hereinafter more particularly provided for.

He shall keep all the books, papers, and moneys of the Com-

pany in the most approved Salamander Fire Proof Iron Safe. No money shall be paid out by the Treasurer, for any purpose, except upon a draft drawn by the Secretary and approved by the President, or in such other manner as the Board of Directors, or Executive Committee, may from time to time direct.

He shall, on or before the tenth day of each month, make a report to the President of all moneys paid out during the preceding month, and once in three months, the balance in the Treasury, and when deposited, and how secured and kept; and in making up accounts of money expended in and about the the said railroad, he shall, as far as practicable, state separately the sum expended on each separate account; that is to say, the amount expended for preliminary surveys, for the purchase of ground, for the right of way, or otherwise; for grading the road; for materials used in the construction of the same, or repairs, and for work and labor in applying the same; also, an account of moneys expended in the purchase of horses, carriages and all other utensils or apparatus used in and about the said road. And after the completion of said road, or any part thereof, so that tolls or other profits shall be received therefrom, a separate account of all such tolls or profits, distinguishing the receipts for the conveyance of passengers, and for frieght, separately, together with a separate account of all moneys expended in the purchase of horses, carriages or carts, engines and other apparatus required for conducting the business to be transacted on such road, and all expenditures of money made for repairs of said road, and the appurtenances thereto belonging, or for charges in conducting the business thereon—to the end that the Board of Directors may be enabled to make and file in the office of the Secretary of State, an annual report in detail, of their receipts and expenditures, as required by the Act “to provide for the incorporation of Rail Road Companies.”

The Treasurer shall annually, at least thirty days before any annual election of Directors, and oftener if required by the President, make out a transcript from his Stock Ledger, setting forth in alphabetical order the names of the several stockholders in the Company, at the time being, with the number of shares belonging to each stockholder, to be submitted to the Board at their annual meeting.



## DUTIES OF SECRETARY.

It shall be the duty of the Secretary to keep regular minutes of all proceedings of the Directors, (and the Executive Committee when required,) at every meeting of the Board, and to record the same in a book provided for that purpose. He shall draw on the Treasurer for all moneys disbursed by the Company ; but no draft shall be drawn by him on the Treasurer for any purpose except upon a voucher or account setting forth the nature of the claim for which the money is claimed, which voucher must have been previously approved by a member of the Executive Committee, and shall be carefully filed away and preserved by the Secretary. He shall give notice to the Directors, at every meeting of the Board, by letters through the public mail or otherwise, of the time and place of all meetings of the Board, except such meetings as shall be held in pursuance of an adjournment duly made at any regular called meeting, and to such members as may be absent from such meeting. He shall immediately after the adjournment of every meeting of the Board of Directors, send to the Treasurer a statement of all moneys directed to be paid at said meeting by the Board. He shall also, before the annual meeting of the Board in January, deliver to the Chairman of the Finance Committee, a certificate of all the moneys directed to be paid out of the Treasury, and all vouchers in his hands upon which he has drawn upon the Treasurer, during the year then ending ; to the end that the Finance Committee may compare accounts and settle with the Treasurer.

Passed September 22, 1851.

DAVIS DIVINE, President.

SHERMAN DAY, Secretary *pro. tem.*



## REPORT OF THE CHIEF ENGINEER.

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TO THE PRESIDENT AND DIRECTORS OF THE PACIFIC AND ATLANTIC RAIL ROAD COMPANY.

*Gentlemen :*

In the three years which have elapsed since the survey of the proposed line of rail road from San José to San Francisco was completed, so great a change has taken place in the population and business of the country, the cost of iron, the value of labor, and in the various elements which enter into the calculation both of the amount of money required to construct the road, and of the revenue it will yield to the stockholders, that the estimates then made do not furnish a satisfactory exhibit of the present condition and prospects of the enterprise. I have made the necessary modifications in the estimates, and shall endeavor to include in this Report all the matter of permanent interest contained in my former one, few copies of which are now in circulation.

The city of San José is situated thirteen miles south-east of of the southern angle of San Francisco bay, and in the middle of the beautiful and fertile valley of Santa Clara, which has at this point a width of about eighteen miles. The general course of this valley is nearly parallel to the Pacific coast, from which it is separated by the Santa Cruz mountains, while the Contra Costa mountains form its north-eastern boundary and divide it from the valley of the San Joaquin. The Santa Cruz range extends north-westerly to the Pacific ocean, which it strikes about seven miles south-west of the Golden Gate. The Contra Costa range terminates to the north at the Straits of Carquinez.

Between these ranges lie the valley of Santa Clara, the bays of San Francisco and San Pablo, and the promontory on which the city of San Francisco is built.

A high ridge, extending from Point San Bruno on the bay of San Francisco, eight miles south of the city, to Point Lobos on the Pacific ocean, closes the Santa Clara valley to the north-west. Several long and rocky spurs extend from this ridge eastward to the bay, terminating in sharp, craggy bluffs, and giving to the western shore of the bay, north of San Bruno, a very irregular outline.

The southern arm of the bay terminates about thirty miles south-east of San Francisco, and from San Bruno Point to its head is encompassed by marsh lands overflowed by the tides. Between the base of the mountains and the overflowed ground, the intervening land sloping gently toward the bay, is narrow at the north-western extremity, but gradually increases in width and decreases in inclination, until at the head of the bay it forms a continuous plain, extending from mountain to mountain.

#### PRELIMINARY SURVEYS.

The determination of the proper line for a rail road from San José as far as the southern base of the San Bruno mountain, presented no difficulty. From the point last named to the Mission Dolores, two routes were examined. One, passing between the mountain and the Santa Cruz range, crosses the San Bruno ridge at a gap north-west of the Abbey Hotel and enters the valley of Islar's Creek. The other passes between the bay and Mount San Bruno, and crossing the spurs of the mountain and an indentation of the bay, unites with the Abbey route near the Mission Dolores. The western line first received our attention, and a survey was made across the Abbey summit and continued to the Mission Dolores. The summit north-west of the Abbey is 299 5-10 feet above high tide, the distance thence to the Mission is 4 73-100 miles, and the natural surface at the latter point is thirty-four feet above high tide. Hence, assuming a depth of cutting of 38 5-10 feet at the Abbey summit, a grade of forty-eight feet to the mile is required to reach the Mission. And, adopting this very high grade, a depth of cutting of 104 5-10 feet, mostly through solid rock, would be necessary at the summit of the ridge dividing Islar and Presita Creeks, south of the

Race Course. It will be observed, by reference to the accompanying map, that both Islar and Presita creeks flow into the tide-marsh west of Capt. De Free's house, and that the dividing ridge terminates abruptly at the head of the marsh. An attempt was made to pass around the ridge in this direction, but the ground was so broken and precipitous, the route was found impracticable.

An examination of the San Bruno ridge also proved that there is no point at which it can be crossed north of the Abbey summit. It is evident from what has been stated that no rail road can be constructed from the Santa Clara valley to San Francisco, passing on the western side of Mount San Bruno, without involving steep grades and an enormous expenditure of money.

The preliminary examinations of the bay line passing east of Mount San Bruno, to which we shall now advert, fully demonstrated the great advantages it possesses over the Abbey route. This line strikes the shore of the bay at the upper end of the Santa Clara valley, at the position marked D on the map, near Point San Bruno. The outline of the shore from Point San Bruno northward, is very irregular, presenting many sharp angles formed by the high projecting rocky spurs of the mountain and the deep indentations of the bay. A careful survey showed that the line of location should pass from Point San Bruno across the cove in front of Visitation Valley to the point of the ridge which bounds the valley on its northern side. There is great uniformity in the depth of water in the cove, and in the character of the bottom, and there is everywhere sufficient depth of mud to give adequate stability to piles. The average depth of water at high tide is ten feet, and of mud twenty-three feet. From the point north of Visitation Valley, marked E on the map, two surveys were made to depressions in the spur which forms Hunter's Point. The Eastern depression (marked F on the map) was found to be eighty-eight feet above tide, and the western (marked G) sixty-nine feet. The last named position, in addition to the advantage of its lower level, enables us to continue the line along the side hill at the head of the marsh, west of Capt. De Free's house, thus avoiding all the marsh land except 800 feet at the mouth of Islar and Presita creeks. Crossing Presita creek we arrive at the point marked H on the map, a

short distance east of the Race Course. From this position to Third street, in San Francisco, two lines were examined and found practicable. One passes by the Mission Dolores, east of the Nightingale, and across the intervening sand hills midway between Mission and Howard streets, until it intersects Third street. The other crosses Mission creek at the brick kiln, and entering the city in a direction oblique to the course of the streets, terminates at Third, near Howard street. This line presents the most favorable profile and was adopted as part of the location. When the location was made the lots crossed had but little value. The great increase in the price of the property which has since taken place makes it necessary that the road should now enter the city on one of the principal streets.

#### LOCATION.

The located line began in the city of San José, at the intersection of Market and San Fernando streets, and following a continuation of the middle of San Fernando street 4521 feet curved to the right until it entered Dr. Hepburn's enclosure, whence it ran in a straight line 8 8-10 miles to a point near the Arroyo Cupertino in the vicinity of Mr. Carr's store or Mountain View Post Office. By an ordinance of the Mayor and Common Council of San José, approved December 2d, 1853, Saint James' square was "appropriated, free of cost, for a period of ninety-nine years, to the sole and exclusive use of the company incorporated to construct a rail road from the city of San José to the city of San Francisco, and known as the Pacific and Atlantic Rail Road Company; provided that said square be used by said company as a depot and for other rail road purposes; and, provided also, that said company signify in writing signed by the President and Directors of said company, their acceptance of the above donation, and file the same with the clerk of this Board within six months after the approval of this ordinance." An acceptance in writing was signed by the President and Directors, and filed with the clerk of the Common Council within the time specified in the ordinance.

St. James' square is situated in the central part of the city: it is 630 feet in length by 550 in breadth, and contains nearly eight acres of ground.

In order to avail ourselves of this grant the road will begin at



St. James' square on First street, and passing through the block immediately west of it, and through the middle of the small street west of Market street, will be continued across the Guadalupe river and a corner of the rancho of Com. Stockton. It will then cross the Alameda and, deflecting to the right on the rancho de los Coches, will unite with the line as formerly located, 1900 feet west of the beginning of the straight line to Cupertino creek. The proposed change in the location is indicated on the accompanying map. The Guadalupe river is crossed by a trestle bridge 100 feet in length. The proposed change of the location will not increase the cost of construction.

The straight line from the Los Coches rancho to Arroyo Cupertino passes 630 yards south of the southern corner of the town of Santa Clara, and crosses Campbell's creek on Mr. Trinouth's land, and the stage road from San José to San Francisco, a little west of Morrison and Jenkins' plough manufactory.

At the Arroyo Cupertino the route deflects 8 1-2 degrees to the right, and crossing the stage road opposite Abner Bryant's house, again curves to the right and is continued in a straight line for 6 6-10 miles, crossing the Arroyo de las Yeguas by a bridge seventy feet in length, and San Francisquito creek, a little south of the present bridge, by a bridge 100 feet long, to a point 600 yards north-west of Mr. Judah's house. Making another deflection to the right, the road passes in front of Mr. Flashner's Hotel, and the same direction is continued to San Matéo creek, which is crossed 300 yards south-west of the bridge on the San José and San Francisco public road.

From San José to Flashner's the valley presents to the eye the appearance of an almost level plain. An inspection of the accompanying profile will show that there are considerable variations in altitude on the located line between these points, although the undulations are so gentle as to be hardly perceptible.

From Flashner's to San Matéo, there is but little level land between the base of the hills and the Bay, and north of San Matéo many of the spurs extend to the Bay.

From San Matéo the line is continued passing near W. D. M. Howard's residence, deflecting to the left near the house of Chino Sanchez, and again to the right, opposite the house of José de la Cruz Sanchez. At the Bel-Air Tavern it once more curves to the right, and crossing a stretch of land overflowed by the



tide, pierces a sandy ridge and strikes the shores of the Bay near Point San Bruno, at the position marked D on the map.

The line now curves around the rocky cliff of Point San Bruno, and is located across an indentation of the Bay, in a straight line to the outer point of the ridge forming the northern boundary of Visitation Valley. We design to construct a pile bridge from Point San Bruno to the point last mentioned. The depth of water and of penetrable matter was ascertained by soundings with an iron rod at a number of points in the located line. The length of the proposed structure will be 13,300 feet. In estimating the cost of the bridge, I have calculated for piles 45 feet in length. Six piles are driven at each bent, and the bents are placed 10 feet apart. The piles are capped and braced, and the bents are connected by four longitudinal stringers, two of which are 8 by 14, and two 10 by 14 inches. The larger stringers are designed to be directly under the iron rails of the track. The bridge, which is 15 feet in width, is covered with three inch plank, on which the iron rails are laid. Before reaching Point San Bruno, the line crosses a small inlet, and after passing the northern point it crosses another. The bottom in both cases is firm, and it is designed to construct the road by building across these inlets a solid embankment. From the northern end of the proposed bridge, the line curves to the left, and passing outside of the rocky point, crosses the small inlet, already mentioned, and is located on a straight line to the summit of the south San Francisco ridge at the point marked G before referred to—69 feet above high tide. The line then crosses Islar's Creek, the rocky spurs at the eastern termination of the ridge between Islar's and Presita Creeks, and arrives at the point marked H on the map, east of the Race Course. From this position the line was continued curving around the western base of the hill, to the north of the Race Course, and crossing Mission Creek near the brick kilns; thence the route was located on a straight line to Third Street, which it intersects between Howard and Mission Streets. The location from the Race Course to San Francisco, must necessarily be changed, and the route by which the road shall enter the city has not been definitely determined. The estimate has been made on the line we have described. The length of the road from Market Street, San José, to Third Street, San Francisco, is 48.04 miles.

Of this distance, there are of straight lines....					42.07	miles.
Of curves having a radius of 8,595 feet.....					1.14	"
do	do	do	7,473	"	0.64	"
do	do	do	5,730	"	1.95	"
do	do	do	2,865	"	2.24	"
Total.....					48.04	miles.

There are of level road.....					15.78	miles.
Of gradients under 5 feet to the mile.....					2.06	"
do	over 5 and not exceeding 10 feet....				4.83	"
do	do 10	do	do 15	"	8.73	"
do	do 15	do	do 20	"	9.77	"
do	do 20	do	do 21.6	"	6.87	"
Total.....					48.04	

The following tables exhibit in detail the gradients and curvature on the line of location :

Table of Grades on the Pacific and Atlantic Railroad.

No. of Grades.	Length of Grade in miles.	Rise of Grade in feet.	Fall of Grade in feet.	Elevation in feet.
1	57	Level.		96
2	1 03	17 6		114
3	1 03	Level.		114
4	1 36	8 8	12	102
5	1 97	10 5	10 2	91 8
6	45	Level.		91 8
7	97	1 75	1 7	93 5
8	2 84	12 8	36 5	130
9	62	8 8	5 5	135 5
10	91	11 4		125 1
11	3 30	20 6	10 4	57
12	1 47	15 8	68 1	33 6
13	40	Level.	23 4	33 6
14	2 04	20 75	41 4	75
15	1 14	7 75		66 2
16	2 10	21 6	8 8	20 7
17	74	15 8	45 5	9
18	1 09	2 8	11 7	12
19	1 76	Level.		12
20	91	19 8	15	30
21	91	16		15
22	1 36	Level.		15
23	74	9 5	7	22
24	97	12	12	34
25	91	17 6	16	50
26	97	18	18	32
27	1 53	11	17	15
28	2 59	Level.		15
29	97	5 28	5	20
30	79	19	15	5
31	5 12	Level.		5
32	1 47	21 2	31	36
33	1 93	Level.		36
34	1 51	14	21	15
35	57	Level.		15
48 04				

Summary.

Length of level in miles.	Length of gradation in miles.			
	From 0 to 5 feet.	From 5 to 10 ft.	From 10 to 15 ft.	From 15 to 21.6 ft.
15 78	2 06	4 81	8 73	16 64

Statement of Length of Straight Lines and Curves.

No.	Straight line. Miles.	Radius 8,935 feet. Miles.	Radius 7,443 feet. Miles.	Radius 5,730 feet. Miles.	Radius 2,865 feet. Miles.
1	0 86				
2	8 79			1 04	
3				0 16	
4	2 71			0 15	
5				0 06	
6	6 61				
7				0 18	
8	10 05			0 36	
9					
10	2 56				
11					
12	2 08				
13					
14		1 14			
15				0 64	
16	2 21				0 24
17	2 37				0 45
18					0 63
19	1 48				0 45
20					0 47
21	0 22				
22					
23	0 78				
24					
25					
26	1 35				
42 07				1 14	0 64
					1 95
					2 24

## THE ESTIMATE.

The graduation has been estimated for a road bed 16 feet in width on embankments, and 20 feet in excavations, and for side slopes of 1 1-2 horizontal to 1 of altitude.

From San José to San Matéo the grades conform very nearly to the natural surface. Between San Matéo and the point where the line strikes the Bay, the road passes over low rolling hills, which are so cut by the grade lines as to nearly equalize the quantities of excavation and embankment. It is not believed that rock will be found southeast of Point San Bruno; but between San Bruno and Mission Creek it will be encountered in all the excavations. By far the heaviest portion of the graduation occurs on the three and a half miles extending from the northern end of the proposed pile bridge, to the point H, east of the Race Course. The mountains on the western side of San José valley contain large forests of redwood and pine, and will furnish all the cross ties and other lumber required in the construction of the road.

The cost, at present, of rail road iron in Liverpool is £7 5s. a ton, freight thence to San Francisco £4 a ton, and duty 30 per cent. I have estimated the cost, delivered on the road, at \$75 a ton, which will cover freights, duty, and all contingent expenses.

A remission of the duty by the United States Government would make a reduction in the cost of the iron required for the road of \$50,000.

It will be the policy of the company to commence laying the superstructure at points in the vicinity of landings accessible from the Bay. Launches, freighted with iron, can unload at the head of Mission Creek, at Point San Bruno, San Matéo Point, Mezesville, and Ravenswood; all of which are near the line of the road. At Mezesville and at the point where the rail road line crosses San Francisquito Creek—which is opposite Ravenswood—an abundant supply of redwood timber for cross ties can be procured, within a distance of five miles. This wood is less subject to decay than any known in the Atlantic States.

## ESTIMATE OF COST OF GRADUATION, MASONRY, AND BRIDGING.

## FIRST DIVISION.

From San José to San Francisquito Creek, 18 miles.

100,310 cubic yards earth wasted and borrowed, at 30 cents. ....	\$30,093 00
30,000 cubic yards earth, hauled 1,600 feet, 40c...	12,000 00
310 cubic yards bridge masonry, \$10.....	3,100 00
Trestle bridge over Guadalupe River, 100 feet long, at \$15 per foot.....	1,500 00
Truss bridge over San Francisquito Creek, 100 feet long, at \$40 per foot.....	4,000 00
Small bridges and open drains.....	1,500 00
Grubbing and clearing.....	3,000 00
	<hr/>
	\$55,193 00

## SECOND DIVISION.

From San Francisquito Creek to San Matéo Creek, 11.60 miles.

89,200 cubic yards earth wasted and borrowed, at 30 cents.....	\$26,760 00
55,800 cubic yards earth, hauled 1,800 feet, at 42c.	23,436 00
455 cubic yards bridge masonry, \$10.....	4,550 00
Small bridges and open drains.....	3,000 00
Grubbing and clearing.....	3,000 00
	<hr/>
	\$60,746 00

## THIRD DIVISION.

From San Matéo Creek to the beginning of the pile bridge at Point San Bruno, 10.1 miles.

71,830 cubic yards earth wasted and borrowed, at 30 cents.....	\$21,549 00
70,520 cubic yards earth, hauled 1,200 feet, at 36c.	25,387 20
56,231 cubic yards earth, hauled 5000 feet by rail- road, 55c.....	30,927 05
2,675 cubic yards bridge masonry, \$9.....	24,075 00
Truss bridge over San Matéo Creek, 100 feet long, at \$40 per foot.....	4,000 00
Superstructure of small bridges and drains.....	2,000 00
	<hr/>
	\$107,938 25



## FOURTH DIVISION,

Is the proposed pile bridge across the cove of San Francisco Bay, north of Point San Bruno, 2.52 miles.

13,300 feet of pile bridging, at \$20 per foot, lineal, \$266,000 00

## FIFTH DIVISION.

From the north end of the pile bridge to the Race Course, 3.48 miles.

48,228 cubic yards earth wasted and borrowed, at 30 cents.....	\$14,468 40
178,200 cubic yards earth, hauled 1,600 feet, 40c..	71,280 00
50,457 cubic yards solid rock, \$2 50.....	126,142 50
706 cubic yards arch masonry, \$10.....	7,060 00
	<hr/>
	\$218,950 90

## SIXTH DIVISION.

From the Race Course to Third street, San Francisco, 2.28 miles.

78,553 cubic yards earth, hauled 1,600 feet, 40c..	\$31,421 20
6,147 cubic yards solid rock, \$2 50.....	15,367 50
921 cubic yards masonry at Mission Creek, \$9...	8,289 00
Superstructure of bridge over Mission Creek, 150 feet long, at \$40.....	6,000 00
	<hr/>
	\$61,077 70

## SUMMARY OF COST OF GRADUATION, MASONRY, AND BRIDGING.

First Division, 18 miles.....	\$55,193 00
Second Division, 11.66 miles.....	60,746 00
Third Division, 10.1 miles.....	107,938 25
Fourth Division, 2.52 miles.....	266,000 00
Fifth Division, 3.48 miles.....	218,950 90
Sixth Division, 2.28 miles.....	61,077 70
	<hr/>
	\$769,905 85

## ESTIMATED COST OF ONE MILE OF SUPERSTRUCTURE.

82 tons iron rails, (56 lbs. to the yard) at \$75.....	\$6,600 00
660 chairs (16 lbs. each), 4.71 tons at \$60.....	282 60
4,000 lbs spikes, at 5 cts.....	200 00
	<hr/>
Cost of iron for one mile.....	\$7,082 60
2,000 cross ties, 8 ft. long, 6 by 8 in., at 75 cts.....	1,500 00
Distributing materials and laying track.....	1,000 00
	<hr/>
Cost of one mile of superstructure.....	\$9,582 60

## SUMMARY OF COST OF CONSTRUCTION.

Graduation, Masonry and Bridging.....	\$769,905 85
Superstructure for 51 miles, including 3 miles for side tracks, at \$9,582 60.....	488,712 60
	<hr/>
	\$1,258,618 45
Add for superintendence ten per cent.....	125,861 85
	<hr/>
Total cost of constructing the road.....	\$1,384,480 30

## BUILDINGS AND FIXTURES.

Two depots at termini of road, at \$20,000 each....	\$40,000 00
Two way depots, \$5,500.....	11,000 00
Eight way stations, \$1,000.....	8,000 00
Two engine houses, \$7,500.....	15,000 00
One machine shop.....	20,000 00
Two turning tables, \$3,000.....	6,000 00
	<hr/>
Cost of buildings and fixtures.....	\$100,000 00

## LOCOMOTIVES AND CARS.

7 locomotive engines and tenders, \$8,000.....	\$56,000 00
15 passenger cars, \$3,000.....	45,000 00
4 baggage cars, \$1,000.....	4,000 00
12 platform cars, \$800.....	9,600 00
40 covered freight cars, \$1,000.....	40,000 00
20 gravel cars, \$500.....	10,000 00
6 hand cars, \$100.....	600 00
	<hr/>
Cost of locomotives and cars.....	\$165,200 00

The value of the land through which the road passes will be so much enhanced by its construction that we ask that the right of way should be granted by all the proprietors. Many of them have already done so, and several have not yet been visited by the officers of the Company. Cases will undoubtedly arise in which the title to the land will be found to be in minors, persons absent from the State or unknown. The right of way under any of these circumstances must be obtained through the Courts in the manner prescribed by the Charter. The sum of fifty thousand dollars is judged sufficient to cover all probable expenses under this head.

To prevent cattle and other stock from encroaching on the road and interrupting the passage of trains, it is recommended that substantial fences should be built on both sides along the whole line, except, of course, across the cove of the Bay and in the city of San Francisco. The cost will be about \$500 a mile; say for 90 miles, \$45,000.

The whole amount required to build the road and put it in operation will be :

For construction of road.....	\$1,384,480	30
“ Buildings and fixtures.....	100,000	00
“ Locomotives and Cars.....	165,200	00
“ For right of way.....	50,000	00
“ Fencing.....	45,000	00
<hr/>		
Total.....	\$1,744,680	30

In the following table, the items of the estimate of the cost of construction have been so arranged as to exhibit the cost of each description of work on each division and on the whole line, and the whole cost of each division of the road.

In our calculation we estimated for 51 miles of superstructure, or  $2\frac{86}{100}$  miles more than the length of the road, the additional length being allowed for side tracks. In the table the cost of these  $2\frac{86}{100}$  miles of superstructure has been included in the first division, as in case either the first or the first and second divisions are built and put in operation before the completion of the remainder of the road, this amount will be required to extend a temporary branch to Ravenswood or to San Matéo Point.

# **TABULAR STATEMENT**

OF ESTIMATED COST OF PACIFIC AND ATLANTIC RAILROAD.

	First Division. From San Jose to San Francisco. 18 miles.	Second Division. From San Francisco Creek to San Mateo Creek—11.66 miles.	Third Division. From San Mateo Cr to Point San Bruno. 10.1 miles.	Fourth Division. From Pt San Bruno to north end of Pile Bridge—2.52 miles.	Fifth Division. From north end Pile Bridge to the Race Course—3.43 miles.	Sixth Division. From Race Course to San Francisco. 2.23 miles.	Total. From San Jose to San Francisco. 48.04 miles.
Graduation.....	\$ 42,093 00	\$ 50,196 00	\$ 77,863 25	\$ .....	\$ 211,890 90	\$ 46,788 70	\$ 428,831 85
Masonry.....	3,100 00	4,550 00	24,075 00	.....	7,060 00	8,289 00	47,074 00
Wooden Bridges..	7,000 00	3,000 00	6,000 00	266,000 00	.....	6,000 00	288,000 00
Grubbing.....	3,000 00	3,000 00	.....	.....	.....	.....	6,000 00
Iron.....	148,451 29	82,583 12	71,534 26	17,848 15	24,647 45	16,148 33	361,212 60
Cross Ties.....	31,440 00	17,490 00	15,150 00	3,780 00	5,220 00	3,420 00	76,500 00
Laying Track....	20,960 00	11,660 00	10,100 00	2,520 00	3,480 00	2,280 00	51,000 00
Superintendence..	25,604 43	17,247 91	20,472 25	29,014 82	25,229 84	8,292 60	125,861 85
Total.....	281,648 72	189,727 03	225,194 76	319,162 97	277,528 19	91,218 63	1,384,480 30



## SOURCES OF REVENUE.

The average number of passengers now traveling by public conveyances, between the cities of San José and San Francisco, is estimated at 150 a day, or, 54,750 per annum. Two steam-boats ply regularly between San Francisco and Alviso, one boat leaving each place every day except on Sundays. A line of stages connects with the boats at Alviso, and carries the passengers to and from San José. Two daily lines run between San José and San Francisco on the western side of the Bay, and one on the eastern side from San José to Oakland. All these stages are generally crowded to their utmost capacity, and it is no unusual occurrence to see, on their arrival and departure, from seventeen to twenty persons packed upon each of them. Two lines of stages between San José and Monterey, and connecting with stages to Santa Cruz, at the town of San Juan, facilitate our intercourse with the southern part of the State. Two daily stages, also, run from San José to the Quicksilver Mines at New Almaden. A number of stages run from San Francisco to the Pulgas Redwoods, and in other points in San Francisco county in the vicinity of the San José road, besides those which go no further than the Mission or Race Course.

The freight which is now brought to San Francisco, from the two counties, traversed by the line of the road, consists chiefly of agricultural products, meats and live stock, lumber, lime and quicksilver.

Santa Clara and Alameda counties together, raise more grain than all the remaining counties in the State, and the amount raised is nearly the same in the two counties. An intelligent gentleman dealing in grain and flour, who visited most of the farmers in Santa Clara and San Francisco counties, to obtain information on this subject, estimates the cereal products which will be sent to market from that quarter at 20,000 tons. A much larger quantity of potatoes than was required for consumption was raised last year, and the price fell below the cost of production, in consequence of which a comparatively small crop was grown the present season. Probably 5,000 tons would be a sufficient estimate for the potatoes, onions, pumpkins, melons, cabbages, peas, grapes, and all other products of the gardens and orchards. The weight of the live stock, including beeves, calves,



sheep and hogs, driven from the Santa Clara valley, and passing through it from the southern part of the State, is about 6,000 tons. It has been found both in Europe and the United States that the loss of weight in driving, and the cost of food, is such as to make it greatly to the interest of owners of stock to avail themselves of railroad transportation.

The hay brought to San Francisco by land and water, from the valley, within the past year, is estimated at 8,000 tons.

Limestone has been found in all, or nearly all, the low hills on the western side of the valley, from the Sanchez Rancho (fourteen miles from San Francisco) to the Quicksilver Mines of New Almaden, and quarries have been opened at several places. Dr. Trask, the State Geologist, informs me that he found limestone near Sanchez, which, when burned, produced lime of a very superior quality. There are a number of kilns in the low hills south of San Francisquito Creek, at which lime is made, which is sent to San Francisco, but I have been unable to ascertain the amount produced in the present year.

I am informed by Captain Halleck, President of the New Almaden Company, that the transportation of the Company between their works and San Francisco has cost, in the last twelve months, \$37,000, three-fourths of the expense being for carriage between San José and San Francisco.

There are in the Red Woods, near the head of San Francisquito Creek, fifteen saw mills, which can cut 100,000 feet of lumber, per day, or say 30,000,000 feet per annum. These mills have not been constantly in operation, indeed, in consequence of the low price of lumber in San Francisco; they have done but little for some months, and the product for the past year has probably not much exceeded 7,000,000 of feet. A vast number of shingles have also been made in the Red Woods, and shipped to San Francisco from Mezesville and other embarcaderos. The freight which is taken into the valley of Santa Clara, from San Francisco, consists principally of furniture, clothing, groceries, books, stationery, jewelry, liquors, tools and machinery. It will be perceived that freight on a large proportion of the articles is generally charged by measurement and not by weight.

I have endeavored briefly to advert to the principal sources from which the rail road will derive its income. But the inference that no more passengers and freight will be carried on a railroad

than are carried by other modes of conveyance before the road is constructed, is no more just than to estimate our winter torrents by the feeble rivulets that flow in their channels during the dry season.

It is difficult to estimate the increase in the number of passengers and amount of freight which will be created by the construction of a rail road. The natural progress of population and business is so rapid in the United States, that it is impossible to ascertain what proportion of the increased traffic which has followed the construction of rail roads, was a direct consequence of that fact and what was due to extraneous causes. A glance at the changes which have been brought about in Europe by the construction of rail roads, will serve to illustrate this point. Baron Charles Dupin, in his "Report on the Paris and Orleans Railway," makes the following statements:

"Experience has proved, both in France and abroad, that in a short space of time the facility, expedition, and economy afforded by railways more than doubles the number of passengers, and the quantity of merchandise.

"In order to support such statements, we will quote the following facts relative to the railways of Belgium, England and Scotland, in positions of extreme difference, and giving rise to a variation in the returns which far exceeded all anticipation:

"COMPARISON OF THE NUMBER OF TRAVELERS CONVEYED DAILY THROUGHOUT A  
WHOLE OR A PORTION OF THE LINE.

RAILWAYS.	<i>No. of Pass. before the establishment.</i>	<i>No. of Pass. after the establishment.</i>
Manchester and Liverpool,	400	1,620
Stockton and Darlington,	130	630
Newcastle and Carlisle,	90	500
Arbroath and Forfar,	20	200
Brussels and Antwerp,	200	3,000

INCREASE OF THE NUMBER OF PASSENGERS BY THE ESTABLISHMENT OF A  
RAILWAY.

Liverpool and Manchester,	300 per cent.
Stockton and Darlington,	380 "
Newcastle and Carlisle,	455 "
Arbroath and Forfar,	900 "
Brussels and Antwerp,	1,400 "

"Thus, even taking as a criterion the road on which the proportional increase is least of all, we still find that the number of passengers will be not only 100 but 300 per cent. The transport of merchandise will experience a similarly rapid increase."

Edward Teisserence, an agent of the French government, in an official communication in relation to English railways, says :

"The Darlington Railway has produced, by its low rates of passage and freight, a complete revolution in the region of country which it traverses. It has increased the value of land 100 or 200 per cent. By these low rates, the freight estimated at 80,000 tons, has been increased to 640,000 tons. The passengers estimated at 4,000 have been increased to 200,000."

The following extract on the influence of railways in developing the resources of a country, is taken from the second Report of the Irish Railway Commissioners :

"On the Newcastle and Carlisle road, prior to the railway, the whole number of persons the public coaches were licensed to carry in a week were 343, or both ways, 686. Now, the average daily number of passengers by railway for the whole length, viz : 61.8 miles, is 228, or 1,596 per week.

"The number of passengers on the Dundee and Newtyle line exceeds at this time 50,000 annually ; the estimated number of persons who performed the same journey previous to the opening of the railway having been 4,000.

"Previous to the opening of a railway between Liverpool and Manchester, there were about 400 passengers per day, or 146,000 per year, traveling between these places by coaches, whereas the present number by railway alone, exceeds 500,000.

"In foreign countries the results arising from the same cause, are equally, if not more striking. The number of persons who usually passed between Brussels and Antwerp, was 75,000 in the year ; but since the rail road has been opened from the former place to Malines, it has increased to 500,000 ; and since it was carried through to Antwerp, the number has exceeded a million. The opening of a branch from Malines to Termonde appears to have added 200,000 to the latter number, so that the passenger traffic of that rail road superceding a road traffic of only 75,000 persons, now amounts to 1,200,000."

The following tabular statement of several rail roads in Massachusetts shows the estimated number of passengers before these roads were built, and the number transported upon them during the year 1848 :

NAME OF ROAD.	Estimated No. of Pass. before opened.	No. of Passengers carried in 1848.
Boston and Worcester,.....	23,500	807,143
Boston and Lowell,.....	37,400	525,764
Fitchburg,.....	71,790	745,825
Eastern,.....	121,700	1,021,169
Boston and Maine,.....		1,057,569
Boston and Providence,.....		569,127
Fall River, .....		241,107
		<hr/> 4,967,704

The preceding statement not only exhibits the wonderful increase in the amount of traveling on the four roads first mentioned, since these works were constructed, but it also shows that the aggregate number of passengers conveyed annually on the seven rail roads which diverge from Boston amounts to nearly five millions of persons, or to twenty-five times the entire population of that city.

We may also notice the fact that the number of passengers carried in the cars on the railroads in Massachusetts, during the year 1851, was more than ten times the population of the State. By recurring to the statements we have presented of the travel on several routes, prior to the construction of the railroads, it will be seen that on quite a number of them it was considerably less than we now have between this city and San José. But these companies do not exhibit the matter in a sufficiently favorable light. Six years since this city had not an existence, and, with the exception of a few gardens, the country between it and San José was entirely uncultivated, and almost uninhabited.

Within eighteen months of the time gold was discovered the city contained twenty thousand inhabitants, and its present population exceeds fifty thousand. But little had been done in farming in Santa Clara valley prior to 1850, since which the progress in settlement and cultivation has been nearly uniform. Every year has added greatly to the population, and every year more land has been tilled. The valleys of Santa Clara, San Juan and San Benito form one continuous valley which extends from San Francisco bay, south-eastwardly, one hundred miles, and embraces not less than 750,000 acres of fertile land, of which only 30,000 have been brought into cultivation. From what has been said it is evident we must, in estimating the traffic which will accrue to your road, take into consideration the increase in wealth and population of the tributary country, which would take place without the rail road, and the increase which is a consequence of the construction of the road. The mildness and salubrity of the climate of San José will make it a favorite abode, and many merchants will doubtless be glad to escape from the noise and dust of the city and will reside either there or at points near the line of the rail road less distant from San Francisco. The number who ride on rail roads for the purpose of recreation is astonishingly large, and no one who knows



the people of San Francisco will doubt that this city will furnish her full ratio of this class of passengers.

*Estimate of the probable receipts of the Pacific and Atlantic Rail Road Company, for the first year subsequent to its completion*

100,000 through passengers, at \$3.....	\$300,000
50,000 way passengers, from all the way stations south of San Bruno, \$2.....	100,000
150,000 way passengers north of San Bruno, 50c...	75,000
60,000 tons down freight, \$4.....	240,000
15 millions of feet of lumber at \$5 per thousand...	75,000
Shingles, posts and rails from San Francisquito Creek to San Francisco, San José and intermediate points.....	5,000
Up freight, chiefly measurement goods, equal to 20,000 tons, at \$5.....	100,000
Gross Receipts.....	<hr/> \$895,000

CURRENT EXPENSES.

Repairs of locomotives, passenger, baggage and freight cars.....	\$60,000
Fuel.....	40,000
Oil and material for cleaning.....	7,000
Salaries, wages, and incidental expenses, chargeable to passenger department.....	40,000
Chargeable to freight department.....	40,000
Repairs of road and reserved fund for renewing and improving it.....	70,000
Salaries of President, Superintendent and Treasurer, and law expenses.....	40,000
Total Current Expenses.....	<hr/> \$297,000
Balance Net Revenue.....	\$598,000

or more than 34 per cent. on the estimated cost of the road.

When we take into consideration the rapid increase of the country in population, and the great probability that in a very short time after the completion of the road, branches will be extended to the mining districts and through the fertile valley to the south-east of San José, we must conclude that this will be



the great artery of communication with the interior, and that we can hardly place too high an estimate on the importance of the road. When we further reflect that the railroad across the Continent must, on leaving San Francisco, enter the Santa Clara valley, we will be convinced that this is truly the first link of of that great work, the early completion of which is loudly demanded by commercial interest, political necessity, and enlightened patriotism.

WILLIAM J. LEWIS,  
Chief Engineer.

## TABLE OF DISTANCES ON THE LINE OF THE RAILROAD.

	From San Jose. Miles.	From San Francisco. Miles.
Santa Clara.....	3 5	44 5
Campbell's Creek.....	5	43
Morrison's Plow Factory.....	9	39
Cupertino Creek.....	10 75	37 25
Carr's Store.....	11	37
Bryant's Creek.....	12 33	35 67
Arroyo de las Yeguas.....	14	34
Crosby's.....	15	33
San Francisquito Creek.....	18	30
Bailey's.....	20 1	27 9
Pulgas Embarcadero.....	22	26
Flashner's.....	25 33	22 67
San Matéo Creek.....	29 66	18 34
San Matéo Knoll—south side.....	30	18
Chino Sanches.....	32	16
Bel-Air Tavern.....	35 75	12 25
San Bruno—Bluff Point.....	39 66	8 34
Rocky Point—north end of Pile Bridge....	42 25	5 75
South San Francisco.....	43 50	4 50
Deep Cut.....	44	4
Islar's Creek.....	44 50	3 50
Presita Creek.....	45 50	2 50
Race Course, "Pioneer,".....	46	2
Mission Creek.....	46 83	1 17
Howard and Third Street.....	48	

# REPORT

OF THE

## CHIEF ENGINEER

OF THE

Pacific and Atlantic Rail Road Co.

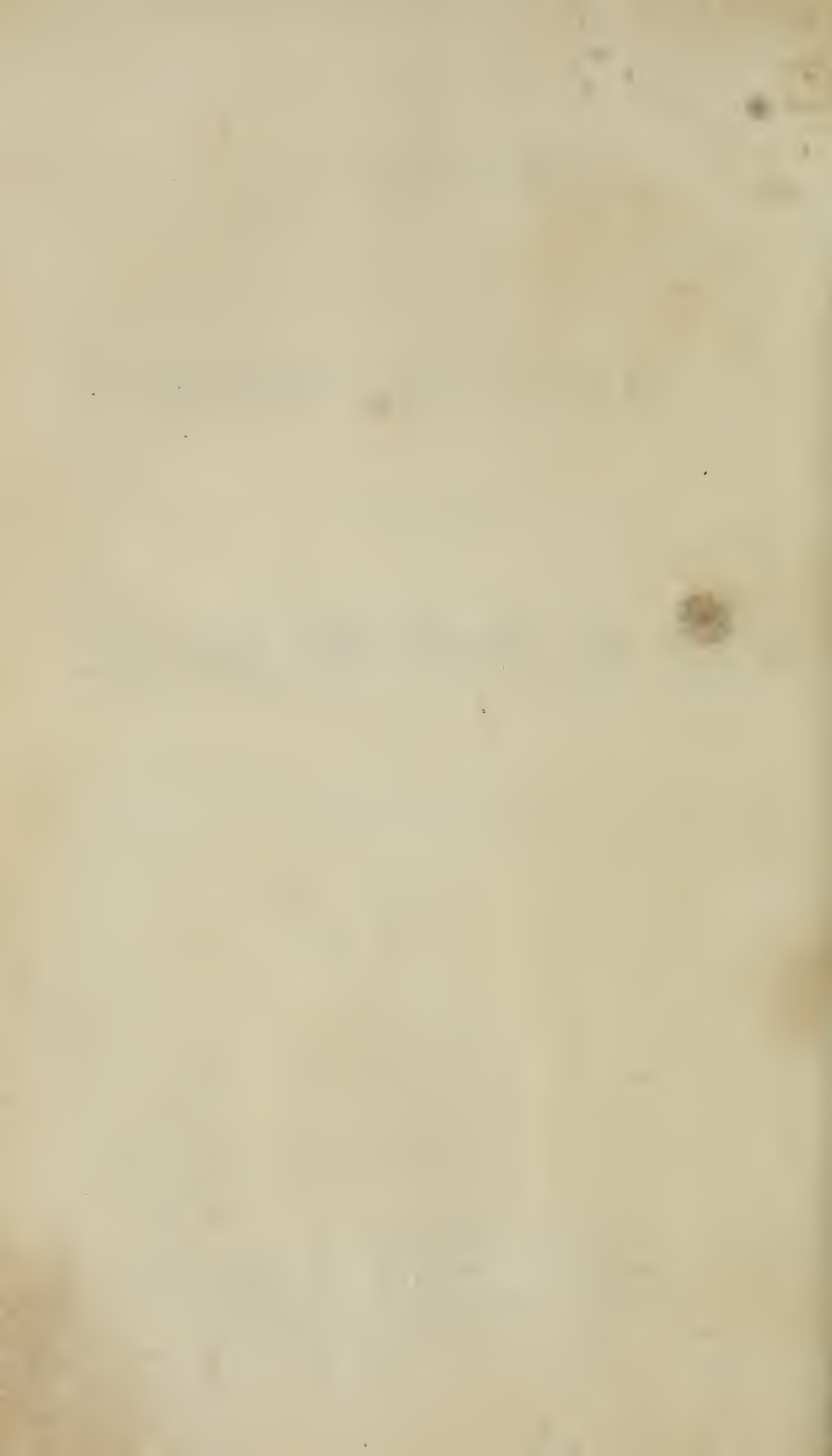
JANUARY, 1855.



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1855.



## REPORT OF THE CHIEF ENGINEER.

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TO THE PRESIDENT AND DIRECTORS OF THE PACIFIC AND ATLANTIC RAIL ROAD COMPANY.

*Gentlemen :*

In the three years which have elapsed since the survey of the proposed line of rail road from San José to San Francisco was completed, so great a change has taken place in the population and business of the country, the cost of iron, the value of labor, and in the various elements which enter into the calculation both of the amount of money required to construct the road, and of the revenue it will yield to the stockholders, that the estimates then made do not furnish a satisfactory exhibit of the present condition and prospects of the enterprise. I have made the necessary modifications in the estimates, and shall endeavor to include in this Report all the matter of permanent interest contained in my former one, few copies of which are now in circulation.

The city of San José is situated thirteen miles south-east of of the southern angle of San Francisco bay, and in the middle of the beautiful and fertile valley of Santa Clara, which has at this point a width of about eighteen miles. The general course of this valley is nearly parallel to the Pacific coast, from which it is separated by the Santa Cruz mountains, while the Contra Costa mountains form its north-eastern boundary and divide it from the valley of the San Joaquin. The Santa Cruz range extends north-westerly to the Pacific ocean, which it strikes about seven miles south-west of the Golden Gate. The Contra Costa range terminates to the north at the Straits of Carquinez.

Between these ranges lie the valley of Santa Clara, the bays of San Francisco and San Pablo, and the promontory on which the city of San Francisco is built.

A high ridge, extending from Point San Bruno on the bay of San Francisco, eight miles south of the city, to Point Lobos on the Pacific ocean, closes the Santa Clara valley to the north-west. Several long and rocky spurs extend from this ridge eastward to the bay, terminating in sharp, craggy bluffs, and giving to the western shore of the bay, north of San Bruno, a very irregular outline.

The southern arm of the bay terminates about thirty miles south-east of San Francisco, and from San Bruno Point to its head is encompassed by marsh lands overflowed by the tides. Between the base of the mountains and the overflowed ground, the intervening land sloping gently toward the bay, is narrow at the north-western extremity, but gradually increases in width and decreases in inclination, until at the head of the bay it forms a continuous plain, extending from mountain to mountain.

#### PRELIMINARY SURVEYS.

The determination of the proper line for a rail road from San José as far as the southern base of the San Bruno mountain, presented no difficulty. From the point last named to the Mission Dolores, two routes were examined. One, passing between the mountain and the Santa Cruz range, crosses the San Bruno ridge at a gap north-west of the Abbey Hotel and enters the valley of Islar's Creek. The other passes between the bay and Mount San Bruno, and crossing the spurs of the mountain and an indentation of the bay, unites with the Abbey route near the Mission Dolores. The western line first received our attention, and a survey was made across the Abbey summit and continued to the Mission Dolores. The summit north-west of the Abbey is 299 5-10 feet above high tide, the distance thence to the Mission is 4 73-100 miles, and the natural surface at the latter point is thirty-four feet above high tide. Hence, assuming a depth of cutting of 38 5-10 feet at the Abbey summit, a grade of forty-eight feet to the mile is required to reach the Mission. And, adopting this very high grade, a depth of cutting of 104 5-10 feet, mostly through solid rock, would be necessary at the summit of the ridge dividing Islar and Presita Creeks, south of the



Race Course. It will be observed, by reference to the accompanying map, that both Islar and Presita creeks flow into the tide-marsh west of Capt. De Free's house, and that the dividing ridge terminates abruptly at the head of the marsh. An attempt was made to pass around the ridge in this direction, but the ground was so broken and precipitous, the route was found impracticable.

An examination of the San Bruno ridge also proved that there is no point at which it can be crossed north of the Abbey summit. It is evident from what has been stated that no rail road can be constructed from the Santa Clara valley to San Francisco, passing on the western side of Mount San Bruno, without involving steep grades and an enormous expenditure of money.

The preliminary examinations of the bay line passing east of Mount San Bruno, to which we shall now advert, fully demonstrated the great advantages it possesses over the Abbey route. This line strikes the shore of the bay at the upper end of the Santa Clara valley, at the position marked D on the map, near Point San Bruuo. The outline of the shore from Point San Bruno northward, is very irregular, presenting many sharp angles formed by the high projecting rocky spurs of the mountain and the deep indentations of the bay. A careful survey showed that the line of location should pass from Point San Bruno across the cove in front of Visitation Valley to the point of the ridge which bounds the valley on its northern side. There is great uniformity in the depth of water in the cove, and in the character of the bottom, and there is everywhere sufficient depth of mud to give adequate stability to piles. The average depth of water at high tide is ten feet, and of mud twenty-three feet. From the point north of Visitation Valley, marked E on the map, two surveys were made to depressions in the spur which forms Hunter's Point. The Eastern depression (marked F on the map) was found to be eighty-eight feet above tide, and the western (marked G) sixty-nine feet. The last named position, in addition to the advantage of its lower level, enables us to continue the line along the side hill at the head of the marsh, west of Capt. De Free's house, thus avoiding all the marsh land except 800 feet at the mouth of Islar and Presita creeks. Crossing Presita creek we arrive at the point marked H on the map, a

short distance east of the Race Course. From this position to Third street, in San Francisco, two lines were examined and found practicable. One passes by the Mission Dolores, east of the Nightingale, and across the intervening sand hills midway between Mission and Howard streets, until it intersects Third street. The other crosses Mission creek at the brick kiln, and entering the city in a direction oblique to the course of the streets, terminates at Third, near Howard street. This line presents the most favorable profile and was adopted as part of the location. When the location was made the lots crossed had but little value. The great increase in the price of the property which has since taken place makes it necessary that the road should now enter the city on one of the principal streets.

#### LOCATION.

The located line began in the city of San José, at the intersection of Market and San Fernando streets, and following a continuation of the middle of San Fernando street 4521 feet curved to the right until it entered Dr. Hepburn's enclosure, whence it ran in a straight line 8 8-10 miles to a point near the Arroyo Cupertino in the vicinity of Mr. Carr's store or Mountain View Post Office. By an ordinance of the Mayor and Common Council of San José, approved December 2d, 1853, Saint James' square was "appropriated, free of cost, for a period of ninety-nine years, to the sole and exclusive use of the company incorporated to construct a rail road from the city of San José to the city of San Francisco, and known as the Pacific and Atlantic Rail Road Company; provided that said square be used by said company as a depot and for other rail road purposes; and, provided also, that said company signify in writing signed by the President and Directors of said company, their acceptance of the above donation, and file the same with the clerk of this Board within six months after the approval of this ordinance." An acceptance in writing was signed by the President and Directors, and filed with the clerk of the Common Council within the time specified in the ordinance.

St. James' square is situated in the central part of the city: it is 630 feet in length by 550 in breadth, and contains nearly eight acres of ground.

In order to avail ourselves of this grant the road will begin at

St. James' square on First street, and passing through the block immediately west of it, and through the middle of the small street west of Market street, will be continued across the Guadalupe river and a corner of the rancho of Com. Stockton. It will then cross the Alameda and, deflecting to the right on the rancho de los Coches, will unite with the line as formerly located, 1900 feet west of the beginning of the straight line to Cupertino creek. The proposed change in the location is indicated on the accompanying map. The Guadalupe river is crossed by a trestle bridge 100 feet in length. The proposed change of the location will not increase the cost of construction.

The straight line from the Los Coches rancho to Arroyo Cupertino passes 630 yards south of the southern corner of the town of Santa Clara, and crosses Campbell's creek on Mr. Tri-nouth's land, and the stage road from San José to San Francisco, a little west of Morrison and Jenkins' plough manufactory.

At the Arroyo Cupertino the route deflects 8 1-2 degrees to the right, and crossing the stage road opposite Abner Bryant's house, again curves to the right and is continued in a straight line for 6 6-10 miles, crossing the Arroyo de las Yeguas by a bridge seventy feet in length, and San Francisquito creek, a little south of the present bridge, by a bridge 100 feet long, to a point 600 yards north-west of Mr. Judah's house. Making another deflection to the right, the road passes in front of Mr. Flashner's Hotel, and the same direction is continued to San Matéo creek, which is crossed 300 yards south-west of the bridge on the San José and San Francisco public road.

From San José to Flashner's the valley presents to the eye the appearance of an almost level plain. An inspection of the accompanying profile will show that there are considerable variations in altitude on the located line between these points, although the undulations are so gentle as to be hardly perceptible.

From Flashner's to San Matéo, there is but little level land between the base of the hills and the Bay, and north of San Matéo many of the spurs extend to the Bay.

From San Matéo the line is continued passing near W. D. M. Howard's residence, deflecting to the left near the house of Chino Sanchez, and again to the right, opposite the house of José de la Cruz Sanchez. At the Bel-Air Tavern it once more curves to the right, and crossing a stretch of land overflowed by the

tide, pierces a sandy ridge and strikes the shores of the Bay near Point San Bruno, at the position marked D on the map.

The line now curves around the rocky cliff of Point San Bruno, and is located across an indentation of the Bay, in a straight line to the outer point of the ridge forming the northern boundary of Visitation Valley. We design to construct a pile bridge from Point San Bruno to the point last mentioned. The depth of water and of penetrable matter was ascertained by soundings with an iron rod at a number of points in the located line. The length of the proposed structure will be 13,300 feet. In estimating the cost of the bridge, I have calculated for piles 45 feet in length. Six piles are driven at each bent, and the bents are placed 10 feet apart. The piles are capped and braced, and the bents are connected by four longitudinal stringers, two of which are 8 by 14, and two 10 by 14 inches. The larger stringers are designed to be directly under the iron rails of the track. The bridge, which is 15 feet in width, is covered with three inch plank, on which the iron rails are laid. Before reaching Point San Bruno, the line crosses a small inlet, and after passing the northern point it crosses another. The bottom in both cases is firm, and it is designed to construct the road by building across these inlets a solid embankment. From the northern end of the proposed bridge, the line curves to the left, and passing outside of the rocky point, crosses the small inlet, already mentioned, and is located on a straight line to the summit of the south San Francisco ridge at the point marked G before referred to—69 feet above high tide. The line then crosses Islar's Creek, the rocky spurs at the eastern termination of the ridge between Islar's and Presita Creeks, and arrives at the point marked H on the map, east of the Race Course. From this position the line was continued curving around the western base of the hill, to the north of the Race Course, and crossing Mission Creek near the brick kilns; thence the route was located on a straight line to Third Street, which it intersects between Howard and Mission Streets. The location from the Race Course to San Francisco, must necessarily be changed, and the route by which the road shall enter the city has not been definitely determined. The estimate has been made on the line we have described. The length of the road from Market Street, San José, to Third Street, San Francisco, is 48.04 miles.



Of this distance, there are of straight lines....	42.07	miles.
Of curves having a radius of 8,595 feet.....	1.14	"
do do do 7,473 " .....	0.64	"
do do do 5,730 " .....	1.95	"
do do do 2,865 " .....	2.24	"

Total.....48.04 miles.

There are of level road.....	15.78	miles.
Of gradients under 5 feet to the mile.....	2.06	"
do over 5 and not exceeding 10 feet....	4.83	"
do do 10 do do 15 " .....	8.73	"
do do 15 do do 20 " .....	9.77	"
do do 20 do do 21.6 " .....	6.87	"

Total.....48.04

The following tables exhibit in detail the gradients and curvature on the line of location :



Table of Grades on the Pacific and Atlantic Railroad.

No. of Grades.	Length of Grade in miles.	Grade per mile in feet.	Rise of Grade in feet.	Fall of Grade in feet.	Elevation abv. high tide in ft.
1	57	Level.	18		96
2	1 03	17 6			114
3	1 03	Level.			114
4	1 36	8 8		12	102
5	97	10 5		10 2	91 8
6	45	Level.			91 8
7	97	1 75	1 7		93 5
8	2 84	12 8	36 5		130
9	62	8 8	5 5		135 5
10	91	11 4		10 4	125 1
11	3 30	20 6		68 1	57
12	1 47	15 8		23 4	33 6
13	40	Level.	41 4		33 6
14	2 04	20			75
15	1 14	7 75		8 8	66 2
16	2 10	21 6		45 5	20 7
17	74	15 8		11 7	9
18	1 09	2 8	3		12
19	1 76	Level.	18		12
20	91	19 8		15	30
21	91	16			15
22	1 36	Level.			15
23	74	9 5	7		22
24	97	12	12		34
25	91	17 6	16		50
26	97	18		18	32
27	1 53	11		17	15
28	2 59	Level.			15
29	97	5 28	5	15	20
30	79	19			5
31	5 12	Level.	31		5
32	21 2	Level.			36
33	1 47	Level.			36
34	1 93	Level.		21	15
35	1 51	Level.			15
	57				
					48 04

Summary.

Length of level in miles.	Length of gradation in miles.			
	From 0 to 5 feet.	From 5 to 10 ft.	From 10 to 15 ft.	From 15 to 21.6 ft.
15 78	2 06	4 84	8 73	16 64

Statement of Length of Straight Lines and Curves.

No.	Straight line, Miles.	Radius 8,595 feet, Miles.	Radius 7,473 feet, Miles.	Radius 5,730 feet, Miles.	Radius 2,865 feet, Miles.
1	0 86				1 04
2					
3	8 79				0 16
4					
5	2 71				0 15
6					
7	6 61				0 06
8					
9	10 05				0 18
10					
11	2 56				0 36
12					
13	2 08				
14		1 14			
15	2 21		0 64		
16					
17					0 24
18	2 37				
19					0 45
20	1 48				
21					0 63
22	0 22				
23					0 45
24	0 78				
25					0 47
26	1 35				
					1 95
	42 07	1 14	0 64	1 95	2 24

## THE ESTIMATE.

The graduation has been estimated for a road bed 16 feet in width on embankments, and 20 feet in excavations, and for side slopes of 1 1-2 horizontal to 1 of altitude.

From San José to San Matéo the grades conform very nearly to the natural surface. Between San Matéo and the point where the line strikes the Bay, the road passes over low rolling hills, which are so cut by the grade lines as to nearly equalize the quantities of excavation and embankment. It is not believed that rock will be found southeast of Point San Bruno; but between San Bruno and Mission Creek it will be encountered in all the excavations. By far the heaviest portion of the graduation occurs on the three and a half miles extending from the northern end of the proposed pile bridge, to the point H, east of the Race Course. The mountains on the western side of San José valley contain large forests of redwood and pine, and will furnish all the cross ties and other lumber required in the construction of the road.

The cost, at present, of rail road iron in Liverpool is £7 5s. a ton, freight thence to San Francisco £4 a ton, and duty 30 per cent. I have estimated the cost, delivered on the road, at \$75 a ton, which will cover freights, duty, and all contingent expenses.

A remission of the duty by the United States Government would make a reduction in the cost of the iron required for the road of \$50,000.

It will be the policy of the company to commence laying the superstructure at points in the vicinity of landings accessible from the Bay. Launches, freighted with iron, can unload at the head of Mission Creek, at Point San Bruno, San Matéo Point, Mezesville, and Ravenswood; all of which are near the line of the road. At Mezesville and at the point where the rail road line crosses San Francisquito Creek—which is opposite Ravenswood—an abundant supply of redwood timber for cross ties can be procured, within a distance of five miles. This wood is less subject to decay than any known in the Atlantic States.

## ESTIMATE OF COST OF GRADUATION, MASONRY, AND BRIDGING.

## FIRST DIVISION.

From San José to San Francisquito Creek, 18 miles.

100,310 cubic yards earth wasted and borrowed, at 30 cents.....	\$30,093 00
30,000 cubic yards earth, hauled 1,600 feet, 40c...	12,000 00
310 cubic yards bridge masonry, \$10.....	3,100 00
Trestle bridge over Guadalupe River, 100 feet long, at \$15 per foot.....	1,500 00
Truss bridge over San Francisquito Creek, 100 feet long, at \$40 per foot.....	4,000 00
Small bridges and open drains.....	1,500 00
Grubbing and clearing.....	3,000 00
	<hr/>
	\$55,193 00

## SECOND DIVISION.

From San Francisquito Creek to San Matéo Creek, 11.60 miles.

89,200 cubic yards earth wasted and borrowed, at 30 cents.....	\$26,760 00
55,800 cubic yards earth, hauled 1,800 feet, at 42c.	23,436 00
455 cubic yards bridge masonry, \$10.....	4,550 00
Small bridges and open drains.....	3,000 00
Grubbing and clearing.....	3,000 00
	<hr/>
	\$60,746 00

## THIRD DIVISION.

From San Matéo Creek to the beginning of the pile bridge at Point San Bruno, 10.1 miles.

71,830 cubic yards earth wasted and borrowed, at 30 cents.....	\$21,549 00
70,520 cubic yards earth, hauled 1,200 feet, at 36c.	25,387 20
56,231 cubic yards earth, hauled 5000 feet by rail- road, 55c.....	30,927 05
2,675 cubic yards bridge masonry, \$9.....	24,075 00
Truss bridge over San Matéo Creek, 100 feet long, at \$40 per foot.....	4,000 00
Superstructure of small bridges and drains.....	2,000 00
	<hr/>
	\$107,938 25

## FOURTH DIVISION,

Is the proposed pile bridge across the cove of San Francisco Bay, north of Point San Bruno, 2.52 miles.

13,300 feet of pile bridging, at \$20 per foot, lineal, \$266,000 00

## FIFTH DIVISION.

From the north end of the pile bridge to the Race Course, 3.48 miles.

48,228 cubic yards earth wasted and borrowed, at 30 cents.....	\$14,438 40
178,200 cubic yards earth, hauled 1,600 feet, 40c..	71,280 00
50,457 cubic yards solid rock, \$2 50.....	126,142 50
706 cubic yards arch masonry, \$10 .....	7,060 00
	<hr/>
	\$218,950 90

## SIXTH DIVISION.

From the Race Course to Third street, San Francisco, 2.28 miles.

78,553 cubic yards earth, hauled 1,600 feet, 40c..	\$31,421 20
6,147 cubic yards solid rock, \$2 50.....	15,367 50
921 cubic yards masonry at Mission Creek, \$9...	8,289 00
Superstructure of bridge over Mission Creek, 150 feet long, at \$40.....	6,000 00
	<hr/>
	\$61,077 70

## SUMMARY OF COST OF GRADUATION, MASONRY, AND BRIDGING.

First Division, 18 miles.....	\$55,193 00
Second Division, 11.66 miles.....	60,746 00
Third Division, 10.1 miles.....	107,938 25
Fourth Division, 2.52 miles.....	266,000 00
Fifth Division, 3.48 miles.....	218,950 90
Sixth Division, 2.28 miles.....	61,077 70
	<hr/>
	\$769,905 85

## ESTIMATED COST OF ONE MILE OF SUPERSTRUCTURE.

82 tons iron rails, (56 lbs. to the yard) at \$75.....	\$6,600 00
660 chairs (16 lbs. each), 4.71 tons at \$60.....	282 60
4,000 lbs spikes, at 5 cts.....	200 00
	<hr/>
Cost of iron for one mile.....	\$7,082 60
2,000 cross ties, 8 ft. long, 6 by 8 in., at 75 cts.....	1,500 00
Distributing materials and laying track.....	1,000 00
	<hr/>
Cost of one mile of superstructure.....	\$9,582 60

## SUMMARY OF COST OF CONSTRUCTION.

Graduation, Masonry and Bridging.....	\$769,905 85
Superstructure for 51 miles, including 3 miles for side tracks, at \$9,582 60.....	488,712 60
	<hr/>
	\$1,258,618 45
Add for superintendence ten per cent.....	125,861 85
	<hr/>
Total cost of constructing the road.....	\$1,384,480 30

## BUILDINGS AND FIXTURES.

Two depots at termini of road, at \$20,000 each....	\$40,000 00
Two way depots, \$5,500.....	11,000 00
Eight way stations, \$1,000.....	8,000 00
Two engine houses, \$7,500.....	15,000 00
One machine shop.....	20,000 00
Two turning tables, \$3,000.....	6,000 00
	<hr/>
Cost of buildings and fixtures.....	\$100,000 00

## LOCOMOTIVES AND CARS.

7 locomotive engines and tenders, \$8,000.....	\$56,000 00
15 passenger cars, \$3,000.....	45,000 00
4 baggage cars, \$1,000.....	4,000 00
12 platform cars, \$800.....	9,600 00
40 covered freight cars, \$1,000.....	40,000 00
20 gravel cars, \$500.....	10,000 00
6 hand cars, \$100.....	600 00
	<hr/>
Cost of locomotives and cars.....	\$165,200 00



The value of the land through which the road passes will be so much enhanced by its construction that we ask that the right of way should be granted by all the proprietors. Many of them have already done so, and several have not yet been visited by the officers of the Company. Cases will undoubtedly arise in which the title to the land will be found to be in minors, persons absent from the State or unknown. The right of way under any of these circumstances must be obtained through the Courts in the manner prescribed by the Charter. The sum of fifty thousand dollars is judged sufficient to cover all probable expenses under this head.

To prevent cattle and other stock from encroaching on the road and interrupting the passage of trains, it is recommended that substantial fences should be built on both sides along the whole line, except, of course, across the cove of the Bay and in the city of San Francisco. The cost will be about \$500 a mile; say for 90 miles, \$45,000.

The whole amount required to build the road and put it in operation will be :

For construction of road.....	\$1,384,480 30
“ Buildings and fixtures.....	100,000 00
“ Locomotives and Cars.....	165,200 00
“ For right of way.....	50,000 00
“ Fencing.....	45,000 00
Total.....	<hr/> \$1,744,680 30

In the following table, the items of the estimate of the cost of construction have been so arranged as to exhibit the cost of each description of work on each division and on the whole line, and the whole cost of each division of the road.

In our calculation we estimated for 51 miles of superstructure, or  $2\frac{96}{100}$  miles more than the length of the road, the additional length being allowed for side tracks. In the table the cost of these  $2\frac{96}{100}$  miles of superstructure has been included in the first division, as in case either the first or the first and second divisions are built and put in operation before the completion of the remainder of the road, this amount will be required to extend a temporary branch to Ravenswood or to San Matéo Point.

# T A B U L A R S T A T E M E N T

## OF ESTIMATED COST OF PACIFIC AND ATLANTIC RAILROAD.

	First Division. From San Jose to San Francisco. 18 miles.	Second Division. From San Francisco to San Mateo Creek—11.66 miles.	Third Division. From San Mateo Cr. to Point San Bruno. 10.1 miles.	Fourth Division. From Pt. San Bruno to north end of Pile Bridge—2.52 miles.	Fifth Division. From north end Pile Bridge to the Race Course—3.43 miles.	Sixth Division. From Race Course to San Francisco. 2.28 miles.	Total. From San Jose to San Francisco. 43.04 miles.
Graduation .....	\$ 42,093 00	\$ 50,196 00	\$ 77,863 25	.....	\$ 211,890 90	\$ 46,788 70	\$ 428,831 85
Masonry .....	3,100 00	4,550 00	24,075 00	.....	7,060 00	8,289 00	47,074 00
Wooden Bridges..	7,000 00	3,000 00	6,000 00	266,000 00	.....	6,000 00	288,000 00
Grubbing .....	3,000 00	3,000 00	.....	.....	.....	.....	6,000 00
Iron .....	148,451 29	82,583 12	71,534 26	17,848 15	24,647 45	16,148 33	361,212 60
Cross Ties .....	31,440 00	17,490 00	15,150 00	3,780 00	5,220 00	3,420 00	76,500 00
Laying Track....	20,960 00	11,660 00	10,100 00	2,520 00	3,480 00	2,280 00	51,000 00
Superintendence..	25,604 43	17,247 91	20,472 25	29,014 82	25,229 84	8,292 60	125,861 85
Total .....	281,648 72	189,727 03	225,194 76	319,162 97	277,528 19	91,218 63	1,384,480 30

## SOURCES OF REVENUE.

The average number of passengers now traveling by public conveyances, between the cities of San José and San Francisco, is estimated at 150 a day, or, 54,750 per annum. Two steamboats ply regularly between San Francisco and Alviso, one boat leaving each place every day except on Sundays. A line of stages connects with the boats at Alviso, and carries the passengers to and from San José. Two daily lines run between San José and San Francisco on the western side of the Bay, and one on the eastern side from San José to Oakland. All these stages are generally crowded to their utmost capacity, and it is no unusual occurrence to see, on their arrival and departure, from seventeen to twenty persons packed upon each of them. Two lines of stages between San José and Monterey, and connecting with stages to Santa Cruz, at the town of San Juan, facilitate our intercourse with the southern part of the State. Two daily stages, also, run from San José to the Quicksilver Mines at New Almaden. A number of stages run from San Francisco to the Pulgas Redwoods, and in other points in San Francisco county in the vicinity of the San José road, besides those which go no further than the Mission or Race Course.

The freight which is now brought to San Francisco, from the two counties, traversed by the line of the road, consists chiefly of agricultural products, meats and live stock, lumber, lime and quicksilver.

Santa Clara and Alameda counties together, raise more grain than all the remaining counties in the State, and the amount raised is nearly the same in the two counties. An intelligent gentleman dealing in grain and flour, who visited most of the farmers in Santa Clara and San Francisco counties, to obtain information on this subject, estimates the cereal products which will be sent to market from that quarter at 20,000 tons. A much larger quantity of potatoes than was required for consumption was raised last year, and the price fell below the cost of production, in consequence of which a comparatively small crop was grown the present season. Probably 5,000 tons would be a sufficient estimate for the potatoes, onions, pumpkins, melons, cabbages, peas, grapes, and all other products of the gardens and orchards. The weight of the live stock, including beeves, calves,

sheep and hogs, driven from the Santa Clara valley, and passing through it from the southern part of the State, is about 6,000 tons. It has been found both in Europe and the United States that the loss of weight in driving, and the cost of food, is such as to make it greatly to the interest of owners of stock to avail themselves of railroad transportation.

The hay brought to San Francisco by land and water, from the valley, within the past year, is estimated at 8,000 tons.

Limestone has been found in all, or nearly all, the low hills on the western side of the valley, from the Sanchez Rancho (fourteen miles from San Francisco) to the Quicksilver Mines of New Almaden, and quarries have been opened at several places. Dr. Trask, the State Geologist, informs me that he found limestone near Sanchez, which, when burned, produced lime of a very superior quality. There are a number of kilns in the low hills south of San Francisquito Creek, at which lime is made, which is sent to San Francisco, but I have been unable to ascertain the amount produced in the present year.

I am informed by Captain Halleck, President of the New Almaden Company, that the transportation of the Company between their works and San Francisco has cost, in the last twelve months, \$37,000, three-fourths of the expense being for carriage between San José and San Francisco.

There are in the Red Woods, near the head of San Francisquito Creek, fifteen saw mills, which can cut 100,000 feet of lumber, per day, or say 30,000,000 feet per annum. These mills have not been constantly in operation, indeed, in consequence of the low price of lumber in San Francisco; they have done but little for some months, and the product for the past year has probably not much exceeded 7,000,000 of feet. A vast number of shingles have also been made in the Red Woods, and shipped to San Francisco from Mezesville and other embarcaderos. The freight which is taken into the valley of Santa Clara, from San Francisco, consists principally of furniture, clothing, groceries, books, stationery, jewelry, liquors, tools and machinery. It will be perceived that freight on a large proportion of the articles is generally charged by measurement and not by weight.

I have endeavored briefly to advert to the principal sources from which the rail road will derive its income. But the inference that no more passengers and freight will be carried on a railroad



than are carried by other modes of conveyance before the road is constructed, is no more just than to estimate our winter torrents by the feeble rivulets that flow in their channels during the dry season.

It is difficult to estimate the increase in the number of passengers and amount of freight which will be created by the construction of a rail road. The natural progress of population and business is so rapid in the United States, that it is impossible to ascertain what proportion of the increased traffic which has followed the construction of rail roads, was a direct consequence of that fact and what was due to extraneous causes. A glance at the changes which have been brought about in Europe by the construction of rail roads, will serve to illustrate this point. Baron Charles Dupin, in his "Report on the Paris and Orleans Railway," makes the following statements:

"Experience has proved, both in France and abroad, that in a short space of time the facility, expedition, and economy afforded by railways more than doubles the number of passengers, and the quantity of merchandise.

"In order to support such statements, we will quote the following facts relative to the railways of Belgium, England and Scotland, in positions of extreme difference, and giving rise to a variation in the returns which far exceeded all anticipation:

"COMPARISON OF THE NUMBER OF TRAVELERS CONVEYED DAILY THROUGHOUT A WHOLE OR A PORTION OF THE LINE.

<i>RAILWAYS.</i>	<i>No. of Pass. before the establishment.</i>	<i>No. of Pass. after the establishment.</i>
Manchester and Liverpool,	400	1,620
Stockton and Darlington,	130	630
Newcastle and Carlisle,	90	500
Arbroath and Forfar,	20	200
Brussels and Antwerp,	200	3,000

INCREASE OF THE NUMBER OF PASSENGERS BY THE ESTABLISHMENT OF A RAILWAY.

Liverpool and Manchester,	300 per cent.
Stockton and Darlington,	380 "
Newcastle and Carlisle,	455 "
Arbroath and Forfar,	900 "
Brussels and Antwerp,	1,400 "

"Thus, even taking as a criterion the road on which the proportional increase is least of all, we still find that the number of passengers will be not only 100 but 300 per cent. The transport of merchandise will experience a similarly rapid increase."



Edward Teisserence, an agent of the French government, in an official communication in relation to English railways, says :

“The Darlington Railway has produced, by its low rates of passage and freight, a complete revolution in the region of country which it traverses. It has increased the value of land 100 or 200 per cent. By these low rates, the freight estimated at 80,000 tons, has been increased to 640,000 tons. The passengers estimated at 4,000 have been increased to 200,000.”

The following extract on the influence of railways in developing the resources of a country, is taken from the second Report of the Irish Railway Commissioners :

“On the Newcastle and Carlisle road, prior to the railway, the whole number of persons the public coaches were licensed to carry in a week were 343, or both ways, 686. Now, the average daily number of passengers by railway for the whole length, viz : 61.8 miles, is 228, or 1,596 per week.

“The number of passengers on the Dundee and Newtyle line exceeds at this time 50,000 annually ; the estimated number of persons who performed the same journey previous to the opening of the railway having been 4,000.

“Previous to the opening of a railway between Liverpool and Manchester, there were about 400 passengers per day, or 146,000 per year, traveling between these places by coaches, whereas the present number by railway alone, exceeds 500,000.

“In foreign countries the results arising from the same cause, are equally, if not more striking. The number of persons who usually passed between Brussels and Antwerp, was 75,000 in the year ; but since the rail road has been opened from the former place to Malines, it has increased to 500,000 ; and since it was carried through to Antwerp, the number has exceeded a million. The opening of a branch from Malines to Termonde appears to have added 200,000 to the latter number, so that the passenger traffic of that rail road superceding a road traffic of only 75,000 persons, now amounts to 1,200,000.”

The following tabular statement of several rail roads in Massachusetts shows the estimated number of passengers before these roads were built, and the number transported upon them during the year 1848 :

NAME OF ROAD.	Estimated No. of Pass. before opened.	No. of Passengers carried in 1848.
Boston and Worcester,.....	23,500	807,143
Boston and Lowell,.....	37,400	525,764
Fitchburg,.....	71,790	745,825
Eastern,.....	121,700	1,021,169
Boston and Maine,.....		1,057,569
Boston and Providence,.....		569,127
Fall River,.....		241,107
		<hr/> 4,967,704

The preceding statement not only exhibits the wonderful increase in the amount of traveling on the four roads first mentioned, since these works were constructed, but it also shows that the aggregate number of passengers conveyed annually on the seven rail roads which diverge from Boston amounts to nearly five millions of persons, or to twenty-five times the entire population of that city.

We may also notice the fact that the number of passengers carried in the cars on the railroads in Massachusetts, during the year 1851, was more than ten times the population of the State. By recurring to the statements we have presented of the travel on several routes, prior to the construction of the railroads, it will be seen that on quite a number of them it was considerably less than we now have between this city and San José. But these companies do not exhibit the matter in a sufficiently favorable light. Six years since this city had not an existence, and, with the exception of a few gardens, the country between it and San José was entirely uncultivated, and almost uninhabited.

Within eighteen months of the time gold was discovered the city contained twenty thousand inhabitants, and its present population exceeds fifty thousand. But little had been done in farming in Santa Clara valley prior to 1850, since which the progress in settlement and cultivation has been nearly uniform. Every year has added greatly to the population, and every year more land has been tilled. The valleys of Santa Clara, San Juan and San Benito form one continuous valley which extends from San Francisco bay, south-eastwardly, one hundred miles, and embraces not less than 750,000 acres of fertile land, of which only 30,000 have been brought into cultivation. From what has been said it is evident we must, in estimating the traffic which will accrue to your road, take into consideration the increase in wealth and population of the tributary country, which would take place without the rail road, and the increase which is a consequence of the construction of the road. The mildness and salubrity of the climate of San José will make it a favorite abode, and many merchants will doubtless be glad to escape from the noise and dust of the city and will reside either there or at points near the line of the rail road less distant from San Francisco. The number who ride on rail roads for the purpose of recreation is astonishingly large, and no one who knows

the people of San Francisco will doubt that this city will furnish her full ratio of this class of passengers.

*Estimate of the probable receipts of the Pacific and Atlantic Rail Road Company, for the first year subsequent to its completion*

100,000 through passengers, at \$3.....	\$300,000
50,000 way passengers, from all the way stations south of San Bruno, \$2.....	100,000
150,000 way passengers north of San Bruno, 50c...	75,000
60,000 tons down freight, \$4.....	240,000
15 millions of feet of lumber at \$5 per thousand...	75,000
Shingles, posts and rails from San Francisquito Creek to San Francisco, San José and intermediate points.....	5,000
Up freight, chiefly measurement goods, equal to 20,000 tons, at \$5.....	100,000
Gross Receipts.....	<hr/> \$895,000

CURRENT EXPENSES.

Repairs of locomotives, passenger, baggage and freight cars.....	\$60,000
Fuel.....	40,000
Oil and material for cleaning.....	7,000
Salaries, wages, and incidental expenses, chargeable to passenger department.....	40,000
Chargeable to freight department.....	40,000
Repairs of road and reserved fund for renewing and improving it.....	70,000
Salaries of President, Superintendent and Treasurer, and law expenses.....	40,000
Total Current Expenses.....	<hr/> \$297,000
Balance Net Revenue.....	\$598,000

or more than 34 per cent. on the estimated cost of the road.

When we take into consideration the rapid increase of the country in population, and the great probability that in a very short time after the completion of the road, branches will be extended to the mining districts and through the fertile valley to the south-east of San José, we must conclude that this will be

the great artery of communication with the interior, and that we can hardly place too high an estimate on the importance of the road. When we further reflect that the railroad across the Continent must, on leaving San Francisco, enter the Santa Clara valley, we will be convinced that this is truly the first link of of that great work, the early completion of which is loudly demanded by commercial interest, political necessity, and enlightened patriotism.

WILLIAM J. LEWIS,  
Chief Engineer.

SAN FRANCISCO, January 1, 1855.

## TABLE OF DISTANCES ON THE LINE OF THE RAILROAD.

	From San Jose. Miles.	From San Francisco. Miles.
Santa Clara.....	3 5	44 5
Campbell's Creek.....	5	43
Morrison's Plow Factory.....	9	39
Cupertino Creek.....	10 75	37 25
Carr's Store.....	11	37
Bryant's Creek.....	12 33	35 67
Arroyo de las Yeguas.....	14	34
Crosby's.....	15	33
San Francisquito Creek.....	18	30
Bailey's.....	20 1	27 9
Pulgas Embarcadero.....	22	26
Flashner's.....	25 33	22 67
San Matéo Creek.....	29 66	18 34
San Matéo Knoll—south side.....	30	18
Chino Sanches.....	32	16
Bel-Air Tavern.....	35 75	12 25
San Bruno—Bluff Point.....	39 66	8 34
Rocky Point—north end of Pile Bridge....	42 25	5 75
South San Francisco.....	43 50	4 50
Deep Cut.....	44	4
Islar's Creek.....	44 50	3 50
Presita Creek.....	45 50	2 50
Race Course, "Pioneer,".....	46	2
Mission Creek.....	46 83	1 17
Howard and Third Street.....	48	





REPORT

OF

Committee of Board of Directors

OF THE

SACRAMENTO VALLEY RAILROAD CO.

MADE AUGUST 7th, A. D., 1855.

SAN FRANCISCO.

O'MEARA & PAINTER, PRINTERS, 132 CLAY STREET.

1855.

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# Sacramento Valley Rail Road.

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ROBINSON, SEYMOUR & CO.—CONTRACTORS.

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OFFICE—LUCAS, TURNER & CO'S BUILDING, CORNER OF  
JACKSON AND MONTGOMERY STS., SAN FRANCISCO.

# REPORT

OF

Committee of Board of Directors

OF

## SACRAMENTO VALLEY RAILROAD COMPANY.

Made August 7th, A. D. 1855.

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*To the President and Board of Directors of the Sacramento Valley Railroad Company :*

The undersigned, a Committee appointed to prepare a report upon the present and prospective condition of the Sacramento Valley Railroad Company, with a view to placing this important enterprise before the public in a tangible shape, respectfully report :

That they have made a careful enquiry into the matter submitted to them for investigation, and with the assistance of the Company's Engineer, and the very valuable aid of Mr. L. L. Robinson, of the firm of Robinson, Seymour & Co., contractors for the construction of the Road, they have embodied what they believe to be a just and full statement, statistical and general, of the history, condition, finances, progress and prospects of the work.

The advantages and importance of Railroad communication between the different portions of this State, owing to the migratory habits of our population, the large amount of inland transportation, and the extraordinary cost of travel and transportation by stages and wagons, became apparent early in the history of the State, induced various Railroad projects between different points, and directed the attention of many of our most enterprising citizens to their particular and comparative advantages and importance.

The position of Sacramento, at the head of general steam navigation on the Sacramento, and of Marysville, at the ultimate head of navigation on the Yuba—their relation to and command of the rich mining counties of Sacramento, Calaveras, El Dorado, Placer, Yuba, Nevada, Sierra and Shasta—the facilities of the intermediate country for construction, and the relation of such a line to all other projected enterprises, indicated a route from Sacramento, skirting the foot hills of the Sierra Nevada, to Marysville, as the work most required, which would be most immediately remunerative, and which would furnish the most economical and convenient base for all such Railroad enterprises as the demands of the State, present and prospective, might require.

As early as 1852 the Sacramento Valley Railroad Company was organized, with a nominal capital of \$1,500,000, but owing to the stringent provisions of the General Railroad Law, and to other causes peculiar to our State, nothing further was done until the following Legislature had modified, in some important particulars, the existing law. The Company was then reorganized and the preliminary surveys made. These surveys developed the fact that the most feasible route was from Sacramento City along the south bank of the American River about twenty-two and one-half miles; thence crossing the river at Negro Bar and skirting the foot hills in a northwardly direction some eighteen miles; thence diverging and passing direct to Marysville, embracing as its termini two of the most important distributing points in the interior.

This location, with the exception of a very short distance in leaving the American River crossing, has no grade greater than fifteen feet to the mile, and will admit of branches to Coloma and Nevada; also an extension up the Sacramento Valley towards Shasta, and also of a southerly extension, *via* Stockton, to San Francisco, and was adopted as combining all the points required, and controlling completely, upon the completion of the Road, and the extensions or connections indicated, *all* the interior traffic of the State of California.

In the month of October, 1854, Col. C. L. Wilson made a renewed effort to obtain subscribers for such an amount of the stock, as would justify the commencement of the work under circumstances promising its speedy completion. Subscriptions to the extent of four hundred thousand dollars, or four thousand shares, were obtained, and on the 24th of November a contract was entered into by the Company with Robinson, Seymour & Co., of New York, to construct and equip a first class Road for forty miles, for the gross sum of \$1,800,000, being at the rate of forty-five thousand dollars per mile, payable as follows:

In full paid Capital Stock at par,	-	-	-	-	\$800,000
In the 10 per cent. per annum Bonds of the Company,					
redeemable in twenty years,	-	-	-	-	700,000
In Cash as the work of construction progressed,	-	-	-	-	300,000
Total,	-	-	-	-	<hr/> \$1,800,000

This arrangement left in the hands of the Company, open to subscription, seven thousand Shares of the Capital Stock, upon which it was estimated that to meet the cash requirements of the contract \$300,000, and the incidental expenses of right of way, depot grounds and engineering expenses, &c., and to open the first division, twenty-two and a half miles, for traffic by the first of October next, would require not to exceed fifty per cent. upon the seven thousand Shares subject to subscription.

Under this contract the contractors have gone forward and at this time very nearly the entire first division of twenty-two and a half miles, from Sacramento to the crossing of the American River at Negro Bar, is graded, bridged and ready to receive the track. All the cars, rolling stock, with two locomotives, are delivered and set up ready for use, and a third locomotive, making the compliment, is en route for San Francisco. All the chairs, spikes, frogs and switches, together with 1250 tons iron, have arrived and are being delivered in Sacramento. The remaining 1000 tons, required for the first division, is en route and will arrive at San Francisco in the next thirty days. 35,000 sleepers, or cross ties, have been delivered, and the remaining 20,000 are ready for delivery as required. The laying of the permanent iron track has commenced and the contractors express great confidence that the first division will be completed and in active operation on or about the first October next.

Immediately on completing the first division the contractors are prepared to commence work upon the second division.

The general features of the Road are as follows:—From Sacramento to the crossing at Negro Bar, the road is nearly straight, with no grade to exceed fifteen feet to the mile. After crossing the American River the maximum grade of forty-five feet to the mile is encountered for a short distance (say three or four miles) in overcoming the spurs or foot hills of the mountains, after which the road falls into the plains, and follows a very direct course with light and level grades to Marysville.

The proposed ultimate northern and southern extensions or connections, are also over a level and fertile country, except between the valley of the San Joaquin and San Francisco Bay, where a maximum grade will be required for a few miles.

In speaking of these extensions it is to be understood that this company do not propose, at least at the present time, to carry out the suggested extensions, but they are indicated and described for the purpose of more particularly exhibiting the prospective relations of the enterprise.

The entire Road from Sacramento to Marysville can be operated very cheaply and at a comparatively small outlay of power.

With reference to the prospective business of the Road, and the traffic which can be relied upon for the first division, and which will apply to the second division, and the extension to Marysville, the committee state the results arrived at by the Chief Engineer of the Company, as follows:

The first division of twenty-two and a half miles, costing complete,



about \$1,200,000, represented by one million Stock and two hundred thousand dollars of bonded debt, will form the sole medium of communication between Sacramento City and the mining counties of Sacramento and El Dorado, also a large portion of Calaveras and Nevada counties, comprising a population exceeding 130,000, who are mostly a mining population, and hence are large consumers. By reference to the statistics appended it will be seen that the total traffic out of Sacramento by wagons in 1854, was averaged at 162,700 tons, and about 275,000 passengers. Fully two-thirds of this ascertained amount of traffic will pass over the entire length of the first division. In order, however, to arrive at conclusions within the limits of the business, only half of this traffic is assumed as applicable to the first division. The rates of charges upon freights will be fifteen cents per ton per mile, or \$3.37 1-2 per ton of 2000 pounds, and for passengers ten cents per mile, or \$2.25 per passenger. This would give a total yearly traffic on the first division, twenty-two and a half miles, as follows:

81,000 gross tons, or 90,000 net tons at \$3.37 1-2,	\$303,300
140,000 passengers,	315,000
Add for mails and expresses,	11,700
“ “ local passengers and freights,	35,000
Total yearly receipts,	\$665,000

The usual working expenses of a railroad in the Eastern States, with charges for freights at two cents per ton per mile and passengers two cents per mile, would equal half the gross earnings; as the rates of charges over this road greatly exceed eastern rates, it does not follow that the working expenses should be increased in a corresponding ratio. For eight or nine months of the year the season is uniformly dry, and there is neither frost or snow to disturb the road. Fuel at the foot of the mountains is as low, or perhaps lower, than on many of the eastern roads, and will cost the company at their stations not more than the average cost on eastern roads, and there is no reason why the working expenses should amount to more than double eastern rates. Placing the estimated business on the first division at eastern rates, would give \$103,500; deducting 50 per cent. would give \$51,750 as the cost for transacting that amount of business. Doubling this sum as a fair estimate of the expenses on the Sacramento Valley Railroad, and the account would be as follows:

Estimated receipts as before,	\$665,000
Less working expenses,	103,500
	561,500
Less interest, 10 per cent. on \$200,000 Bonds,	20,000
Would leave as dividends on \$1,000,000 Stock,	\$541,500
Or upwards of fifty per cent. per annum.	

In estimating the business of the first division no allowance has been made for return freights, or for increased business consequent upon the construction.

It would be doing injustice to the prospects of the Road were this branch of its business overlooked, for it must be evident that in a short time an important item in the business of the Road will be derived from its return freights.

It is a well known fact that neither building nor paving stone can be procured in proximity to San Francisco, of a desirable quality, and that granite is now supplied from China, Massachusetts, and even from Europe. In this particular Sacramento is even worse off than San Francisco, the cost of transportation from the mountains to Sacramento almost entirely precluding its use. Sacramento is also destitute of lumber, lime and wood, and now derives her supply at a great expense, either from San Francisco by water, or from the mountains by teams.

At the crossing of the American River near Negro Bar, the eastern terminus of the first division, are inexhaustible quarries of granite of the best description, and perfectly accessible. This granite can be placed in San Francisco, with this road in operation, *at half the present cost of building stone in that city*, and can be delivered in Sacramento at the present cost of brick.

A large traffic in building stone can with safety be relied upon, as the growing cities of San Francisco and Sacramento, together with the important and extensive Government works in and about the harbor of San Francisco, must require vast amounts of this material; and as the locality of Negro Bar offers the best and cheapest material, it cannot be doubted but a large traffic must grow out of this article alone. The same remark will apply to paving stone; at the crossing of the river, and for a long distance above and below, there is any required amount of this material, of the finest description, washed out by the miners, and can be placed in Sacramento and San Francisco, over this Road, so cheaply as to successfully compete with the present system of planking. This article, which is of prime necessity in cities, cannot be procured elsewhere at as low a cost, and must form an important item in the back traffic of the Road. The mountains furnish lime, lumber and wood in large quantities, which are now brought to Sacramento by teams, and these articles will prove no inconsiderable items of downward freights. Bricks, burned in the mountains where wood is of little value, will also add considerably to the business of the Road.

Hay, grain, hides, wool, and many other items of which a ready means of transportation will stimulate the production in a population of 130,000 people, but which now have no value, consequent upon the excessive cost of transportation, will form a constantly increasing source of business. In fact, there can be no doubt that the back traffic over the First Division, from its opening, will be more than sufficient to pay all the working expenses as estimated.

The estimate of revenue upon the First Division may be considered as low in every particular, for the increased traffic will fully equal the

present traffic, as estimated, independent of the local increase of population.

On the completion of the Second Division the Road will control, in addition, the traffic of all of Placer county, all of Nevada and Sierra, and a large portion of Yuba and Butte, all well populated and rich mining districts, and will add some 75,000 people to the number supplied by the First Division.

The traffic connected with these counties (which the First Division will not alone control) is very large, and while it will add to the traffic of the First Division, will, from the comparatively small increase in working expenses, remunerate the Company fully as richly as the First Division.

The additional receipts that may with certainty be depended upon on the completion of the forty miles, may with safety be set down as 70,000 tons additional freight per year and 100,000 passengers per year, transported an average distance of thirty-five miles, which, at the rates before assumed, would yield—

For freights,	-	-	-	-	-	-	-	-	-	\$367,800
For passengers,	-	-	-	-	-	-	-	-	-	350,000
										<hr/>
										\$717,500
Deduct for working expenses, in consequence of heavier grades and curvatures, say 20 per cent.,	-	-								143,500
										<hr/>
Leaving as additional profit on Second Division,	-	-								\$574,000
To which add estimated profit on First Division,	-	-								561,500
										<hr/>
Gives as the total net revenue on the forty miles,	-	-								\$1,135,500
Deducting the interest on bonded debt, \$700,000, at 10 per cent.,	-	-	-	-	-	-	-	-	-	70,000
										<hr/>
Leaving as net earnings applicable to dividends,	-	-								\$1,065,500
										<hr/>
The two Divisions will probably be represented by a cost of										\$2,200,000
										<hr/>
To wit, 10 per cent. per annum Bonds, payment in 20 years,										700,000
Capital Stock,	-	-	-	-	-	-	-	-	-	1,500,000

Showing that the profits of the Road would be equal to about 66 2-3 per cent. per annum, a margin sufficiently large to cover any contingency that may arise.

As the rates fixed by law are so much lower than the present rates of transportation, being about one-sixth for freights and one-third for passengers, it will be a long time before the necessity will exist for reducing the rates consequent upon an increased population and a decreased price of labor. When that time does arrive, the increased business upon the Road, consequent upon the very causes which will cause a reduction of prices, will well justify the Company in making the reductions demanded.

It may be remarked here, that all the estimates of traffic presented are based upon present travel and transportation. It is well known, however, that there is a uniform and large increase of travel, by reason of the greater economy and facility afforded by a Railroad; but as there is no common standard by which to measure this increase, the Committee have not thought it advisable to indulge in mere speculation.

Statement of tonnage arriving at Sacramento from tide water, furnished by N. A. H. Ball, Esq., collector at Sacramento :

	Ships	Brigs	Schrs	Slps	Brigs	Total No. vessels.	Tonn'g sail vessels.	Steam tonn'g.	Total. tonn'g
Vessels arriv'd fr'm April 1st, 1852, to April 1st, 1853.	2	24	246	124	14	410	29800	381595	411895
From April 1, 1853, to April 1, 1854.	1	8	233	121	17	380	24409	345195	369604
Total in two Years,	3	32	479	245	31	790	54209	726780	780999

Returns of tonnage arriving from April 1, 1854, to Oct. 1, 1854 :

	Schrs	Slps	No. of trips of steam's	Tonn'g sail vessels.	Tonn'g Steam's	Total Tonn'g
For month April, 1854. ....	25	11	116	2296	29225	31521
" " May, " .....	23	9	122	2193	25543	30786
" " June, " .....	19	9	121	1742	25022	29764
" " July, " .....	19	13	130	1933	26265	28193
" " Aug., " .....	20	10	117	1864	23691	25555
" " Sept., " .....	26	17	135	2601	24674	27275
Total,.....	132	69	741	12629	160420	173049

The steamers register their total tonnage, but the actual tonnage carried amounted to 350 tons daily, or for six months, - - - - - 63,000

The sailing vessels carry about twenty-five per cent. more than they register, or, - - - - - 15,786

For six months, - - - - - 78,786

Making a yearly aggregate of tons, - - - - - 157,572

Of the amount of freights arriving at Sacramento it is estimated that about one-tenth only is consumed there.

Statement furnished by the Mayor and Harbor Master of Sacramento, of tons of freight arriving at Sacramento in one week, Oct. 17 to 23, inclusive :

Oct. 17, 1853, Monday.	Assorted cargoes,	-	-	783 tons.
Tuesday,	"	-	-	594 "
Wednesday,	"	-	-	448 "
Thursday,	"	-	-	438 "
Friday,	"	-	-	345 "
Saturday,	"	-	-	499 "
Sunday,	"	-	-	544 "
Total,	-	-	-	3,651 tons.



Which would give a total annual tonnage of 190,000 tons. This was during the fall business and would be probably too high an average. There was received during same week via river, 199,000 feet lumber and 600 cords wood.

Statement furnished by R. Chenery, Esq., President California Steam Navigation Co., of average daily amount transported from San Francisco :

To Sacramento, average 400 tons daily,	-	125,000 tons per year.
To Marysville, " 100 " "	-	35,000 " "
To Stockton, " 175 " "	-	55,000 " "
Total per year,		215,000 tons.

The foregoing statement by Mr. Chenery does not include the shipments by steamers of other companies.

Return made by T. D. Judah, Chief Engineer, from actual count of the traffic out of Sacramento for Six Days of week ending May 29th, 1854 :

The Tonnage passing out on wagons was,	-	-	-	2,035 tons.
The passengers out and in—Number,	-	-	-	4,235

The above would give per year, Freight, - - 108,340 tons.  
And a passenger movement of - - - 230,222 persons.  
This was after the spring trade, and deemed as a minimum traffic.

Return made by T. D. Judah, Esq., Chief Engineer, from actual count, as above, of the traffic out and into Sacramento for Five Days, ending October 16th, 1854 :

		Average per Diem.
Stage passengers, out and in,	- - 1,040	208
Wagon " " - - - 1,295	- - - 1,295	259
Riders, - - - - 642	- - - 642	128
Footmen, - - - - 380	- - - 380	76
Drivers, - - - - 2,534	- - - 2,534	507
Wagons, - - - - 1,771	- - - 1,771	354
Stages, - - - - 121	- - - 121	24
Saddle Horses and Mules, - - - 681	- - - 681	136
Cattle, - - - - 501	- - - 501	100
Tons of Freight, - - - 2,621	- - - 2,621	525

Taking the foregoing as an average would give a yearly traffic of 190,000 tons, and a passenger movement of 262,800 persons, excluding drivers.

Summary of the Travel and Traffic out and into Sacramento on the 17th day of October, 1854, which is inserted separately, to exhibit a maximum of the Fall and Spring traffic, from an actual count by Mr. Judah :



Stage Passengers,	-	-	-	-	-	-	-	-	312
Wagon "	-	-	-	-	-	-	-	-	243
Riders and Footmen,	-	-	-	-	-	-	-	-	279
Passengers, excluding Drivers,	-	-	-	-	-	-	-	-	834
Drivers,	-	-	-	-	-	-	-	-	683
Animals employed,	-	-	-	-	-	-	-	-	1,891
Vehicles,	-	-	-	-	-	-	-	-	555
Tons of Freight,	-	-	-	-	-	-	-	-	770
Number of Cattle,	-	-	-	-	-	-	-	-	100

In all the returns of Mr. Judah, no count was made of pleasure travel or city or ranch teams. The sole count was of the movement between Sacramento and the mountains. This day's traffic, applied to a whole year, would give—

A total per year, tons of Freight,	-	-	-	236,520
Total Passenger movement, excluding drivers, of	-	-	-	283,605 persons.

As the above return exhibits a maximum of the heavy fall traffic, and as that of May exhibits a minimum, an average of the two would probably be a near approximation to the average business of the year :

The return for May, 1854, gave a yearly tonnage of - 108,340 tons.  
The return for October, 1854, gave a yearly tonnage of 236,520 "

	344,860	"
Making an average yearly tonnage, by teams, of	-	172,430

The returns for May, 1854, gave a yearly passenger movement of,	-	-	-	-	-	-	262,800
The returns for October,	-	-	-	-	-	-	283,600

		546,400
Making a yearly average of passenger movement,	-	- 273,200

A reference to the returns made of freights received at Sacramento, will give the following results :

First, returns by Mr. Ball, for six months, amounts to,	
for one year,	157,572 tons.
Second. returns from Mayor and Harbor Master, for one week, amounts, for one year, to	190,000 "
Third, returns by California Steam Navigation Company, adding sailing vessels, for one year	160,000 "
	507,572 tons.

Thus showing an average amount of 169,190 tons of freight per year arriving at Sacramento by steam and sail ; of this amount, as a maximum, one-tenth was allowed for consumption at Sacramento, which would leave 153,000 tons as the amount sent forward.

By the average of results arrived at from actual count, it appears there was 172,480 tons of freight passing out on wagons.

This discrepancy may be accounted for in part by the vegetables transported into the interior, which were produced in the immediate neighborhood of Sacramento, and were excluded as ranch teams, and partly by the wheat and barley produced on the opposite banks of the river, in Yolo county, which seeks Sacramento as its market.

An average of the two amounts will not, however, prove very far from correct; which would give a yearly average tonnage of 162,740 tons, as the amount transported into the interior by teams.

The sum paid by the mining population for the transportation of this immense amount of material, is in the aggregate astonishing, assuming the average distance at forty miles. The ruling rates for freights on wagons is one dollar per ton per mile, which would give on 162,740 tons transported by teams forty miles, the enormous sum of six and a half millions of dollars, as the annual cost of transportation of the material consumed by a population not exceeding 240,000.

The following counties which are more or less interested in the advantages of this road, are estimated to contain a population as follows :

Sacramento,	-	-	-	-	-	25,000
El Dorado,	-	-	-	-	-	70,000
Calaveras,	-	-	-	-	-	30,000
Amador,	-	-	-	-	-	20,000
Butte,	-	-	-	-	-	12,000
Sierra,	-	-	-	-	-	20,000
Sutter,	-	-	-	-	-	2,000
Placer,,	-	-	-	-	-	30,000
Nevada,	-	-	-	-	-	30,000
						<hr/>
						239,000

In presenting a statement of the present financial condition of the Company, it will be observed that over and above the eight thousand shares, representing \$800,000, set apart to meet the liabilities of the Company to the contractors, there remained seven thousand shares (representing \$700,000) subject to subscription and assessment, from which was to be raised by assessment the amount of money called for by the contract, \$300,000; also, the expenses for right of way, depot ground and other incidental expenses.

Of the original subscribers, many have failed to meet their assessments, and their stock has consequently been forfeited, and there now remains of subscribed stock 2814 shares, and of stock unsubscribed and now open to subscription, 4186 shares. This stock unsubscribed is open to subscription, upon the payment of the present calls, which amount to fifty per cent. There is now due upon subscribed stock, to make good the fifty per cent., the sum of \$28,720, which, together with fifty per cent. on the unsubscribed stock, \$209,300, will make the gross sum of \$238,020 yet payable into the treasury upon a full subscription and fifty per cent. paid in.

It will appear from an examination, that the liabilities of the Company, present and prospective, will be more than provided for by the amount last stated.

There has been paid into the treasury of the Company, by subscribers, the sum of \$113,090, which amount has been disbursed in the payment of estimates due Messrs. Robinson, Seymour & Co., the expenses of the Engineer Corps, right of way and other incidental expenses of the Company.

On the fifth day of August instant there had been estimated to Messrs. Robinson, Seymour & Co., for work done and material delivered for the Road, the gross sum of \$381,859 50, of which amount \$128,474 83 was payable in money, the remainder in bonds and stock, as per contract. There had been paid to Robinson, Seymour & Co., by the Company, on the 1st of August instant, the sum of \$106,939 17, leaving a balance in favor of the contractors of \$21,535 66. There was also a small balance of interest due the contractors, the amount of which is not ascertained.

Besides the balance due Messrs. Robinson, Seymour & Co., as above, there is an outstanding acceptance of the Company for the sum of \$37,500, to mature on the first day of November next.

In addition to the foregoing liabilities by the terms of the contract, the Company are bound to advance freights on machinery, and freights and duties on iron upon arrival. The advances thus to be made, mostly in the course of the ensuing month, will amount to about \$80,000, and which will cover the entire estimates on iron and machinery not yet estimated, leaving the laying of the track and setting up of the machinery and rolling stock the principal item to be provided for. It is the opinion of the Committee, from a careful examination of the work and the material yet to be estimated, that the sum of \$130,000 will prove amply sufficient to meet all the contract and current liabilities of the Company, between this time and the first of October next; at which time, in the ordinary course of business, the first division of the Road should be completed, finally estimated and delivered to the Company. The first division completed, no difficulty can be anticipated about meeting the acceptance referred to, due the first of November. It is this sum, inconsiderable in the prosecution of so important an enterprise, that is now required, and your committee can not believe that any considerable effort will be required to secure such further subscriptions as will place the Company in an unembarrassed and independent position.

In the success of this enterprise every citizen of the State is concerned. It will awaken the energies of the State to new life. The demonstration it will afford will immediately attract and command the capital and enterprise of the East. Labor and population will come with capital and enterprise. Railroads will soon traverse our valleys and penetrate our mountains, developing our unlimited resources and establishing our prosperity. These results are not speculative, but legitimate and necessary consequences of the success of this enterprise; and while these results may be relied upon, it is the opinion of your Committee that the construction and success of one Railroad in

this State will do more toward securing the great Road to the Atlantic than all the action to be even hoped for from the Federal Congress. That the great commercial entrepot of San Francisco has a peculiar interest in this, as in all other works of a like nature, is too evident to admit of discussion; and as its citizens have already taken a deep interest in all projects of this nature and have taken an active and leading interest in this, your Committee do not doubt but that upon a full understanding of the condition and progress of the enterprise, they will give it all the substantial aid its successful prosecution may require.

All of which is respectfully submitted.

E. W. BURR,	}	Committee.
W. J. PARDEE,		
J. A. McDOUGALL,		
R. CHENERY.		

5  
COMPLIMENTS  
COL. MARSH  
CALIFORNIA FARMER

PACIFIC RAILROAD

SPEECH

OF

HON. LELAND STANFORD,

IN THE

CONSTITUTIONAL CONVENTION

OF THE STATE OF NEVADA,

On WEDNESDAY, JULY 13th, 1864.

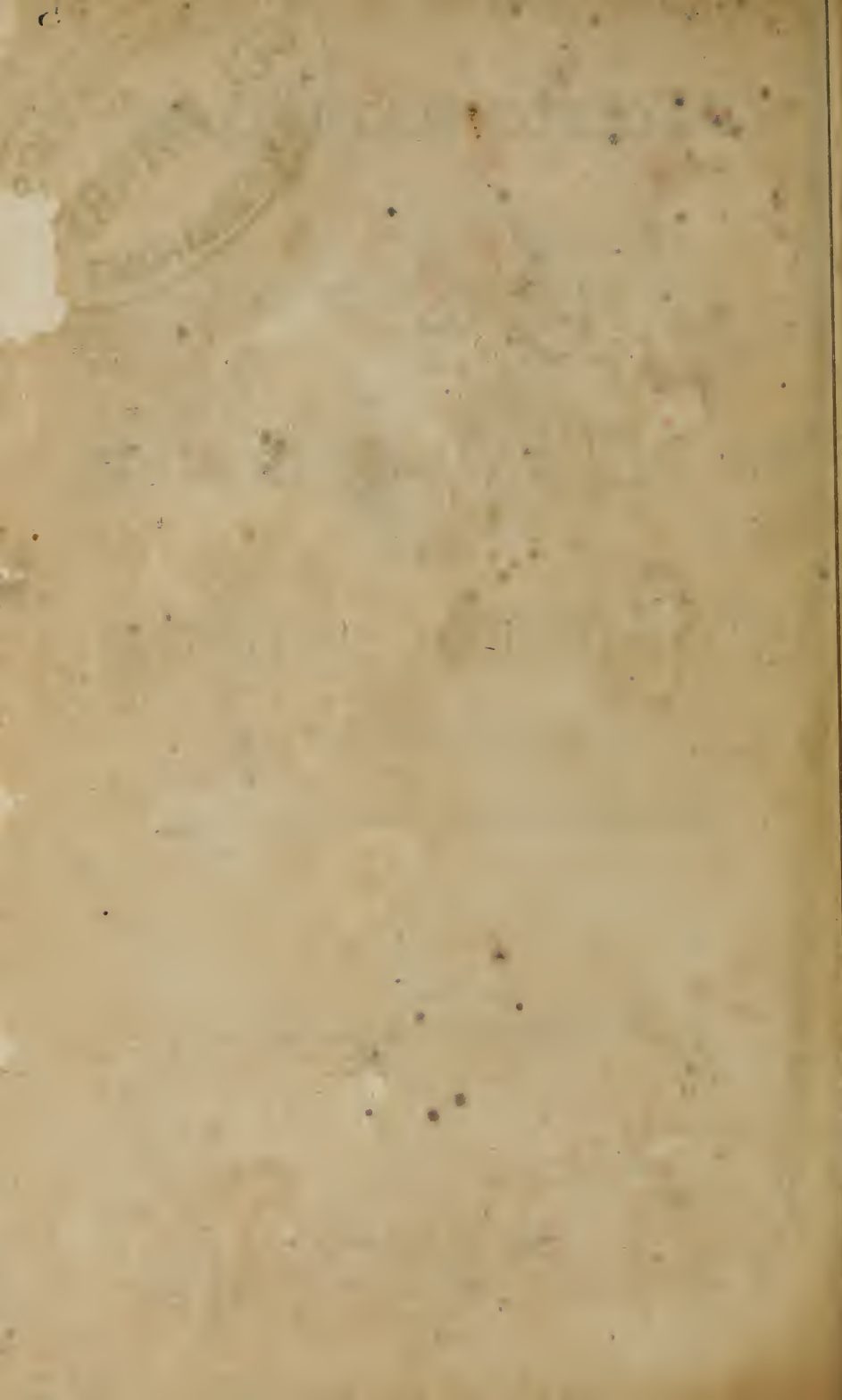
ANDREW J. MARSH, Official Reporter.

SAN FRANCISCO, CAL.

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1865.





# IN THE CONVENTION,

*Assembled at Carson City, N. T., to frame a Constitution and form a State Government for the State of Nevada, on the 13th day of July, 1864.*

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Mr. WARWICK, of Lander, said he desired to suggest a postponement of the subject then before the Convention, for the reason that ex-Governor Leland Stanford, President of the Pacific Railroad, was present, and he knew that members desired to be enlightened in regard to that important enterprise. He therefore moved that the rules be suspended, and that the further consideration of this subject be postponed for the present; and further, that Hon. Leland Stanford be invited to address the Convention on the subject of the Pacific Railroad, and also to answer any question which might be put to him by members on that subject.

The question was taken, and the motion was agreed to.

## REMARKS OF EX-GOVERNOR STANFORD.

The PRESIDENT introduced the Hon. Leland Stanford, of California, President of the Central Pacific Railroad of California.

Mr. STANFORD—Mr. President and gentlemen of the Convention: I appreciate very highly the honor of this compliment which has been awarded me. I may say I am very grateful for it indeed. Devoting myself, as I have done for several years past, and as I am doing at the present day to the construction of the Pacific Railroad, I do not desire merely to make a speech on this occasion; I desire rather that this interview shall partake more of the character of a free conference, because I am well aware that every gentleman present is earnestly desirous of securing the speedy construction of the Pacific Railroad; not only the construction of the road across the mountains, but also the construction of the road across the plains to some point that shall connect us on this coast with the Atlantic States. This is the great want, not only of Nevada, but of the entire Pacific coast. It is not necessary, of course, that I should dilate at all upon the advantages to be derived by the people of this Territory from the construction of that road, either eastward or westward; it is better, I imagine, that

I should confine myself to pointing out as well as I am able how these advantages may best be obtained. To do so, I will refer somewhat particularly and as briefly as possible to the position of the Central Pacific Railroad of California—its present condition, its prospects, its wants and its means.

You are well aware, gentlemen, that Congress, by the Act of 1862, granted liberal donations in aid of the construction of the Pacific Railroad, limiting its aid only to the extent of one hundred millions of dollars. They also gave by that Act 6,400 acres of land to the mile for the construction of the road. Since that time, however, another Act has been passed by Congress, amending that first Act very materially, making it much more practical in its character. The first Act gave \$16,000 per mile for building the road on the plains, and \$48,000 per mile over the mountains, and also \$32,000 per mile for passing through the Territories. That has been changed by giving double the amount of land per mile, which was first allowed the several companies. And further, by the former Act, the assistance of the Government was made to become a first lien on the road; but by the Act of last session the Government gives the same assistance in bonds per mile, but allows the Railroad Company to make a first mortgage upon the road to an equal amount, so that now when the Central Pacific Railroad Company receives \$48,000 per mile in Government bonds, they are allowed to make a mortgage, which will be a first mortgage on the road, to the same amount, and they receive the Government bonds in addition. And as the base of the mountains has been determined by the President to be only about eight miles from Sacramento, it amounts practically to assuring \$96,000 per mile towards the construction of the road, one-half in the bonds of the Company, and the other half in bonds of the United States. This, of course, is a large assistance, but still it is not sufficient of itself to construct the road over the mountains, many miles of which will cost much more, and very little of it from the present terminus will

cost much less. Therefore you will observe that the means of the Company, so far as credit is concerned, to wit: the first mortgage bonds of \$48,000 per mile of its own mortgage bonds, and the \$48,000 per mile of the Government bonds, especially if in currency, is not sufficient to construct the road.

The question therefore arises, how shall the necessary means be obtained for building the road? After the first mortgage made on the road of \$48,000 per mile, and then the Government assistance becoming second mortgage bonds to the same amount, are expended, so far as borrowing is concerned, the means of the Company must necessarily be exhausted, because third mortgage bonds would be of very little value if they were issued. Its dependence after that, therefore, becomes merely the stock subscriptions and the earnings of the road. But in this country, where money is worth two per cent. per month, or about that, on the average, it can hardly be expected that there will be any large amount of stock subscriptions, especially where an immediate return in money is not and cannot be anticipated. Therefore, so far as stock is concerned, we must depend upon foreign assistance or subscriptions. A great point is to give confidence abroad in the stock of the Company, so that in time, as the road progresses, and is doing a fine business, as no doubt it will, the Company may entertain strong hope that there will be such confidence abroad in the stock of this railroad that people in communities where money is not worth more than five, six, or seven per cent., at most, per annum, will be willing to come forward and invest in this railroad. On this side we have for some time reached the conclusion that it is vain to seek for further subscriptions at present to the stock.

Now then, gentlemen, I hardly know how to address you in reference to this subject without appearing to interfere perhaps too much in your deliberations; but I will say this, that if you desire to aid the Pacific Railroad, and I am quite sure you do, the proper and most effectual mode of doing so is by assisting it over the mountains. This railroad is not a mere California project, as some have alleged, or a project which interests only people outside of your own Territory. On the contrary, it is an enterprise in which the people of this Territory are as much interested as any people in the world, and even more, for without it you are isolated. The people of California do not need a railroad to Nevada so much as the people of Nevada need a railroad to California. Now, my idea is that the true way for you is to aid the railroad while it is passing over the mountains; and that you may make yourselves entirely secure, that whatever aid you give shall not be thrown away, or be misapplied, you can say that your aid shall not come in until the road has reached a certain distance from navigable waters, or from the Sacramento river. For instance, when it has reached fifty, or sixty, or seventy miles into the mountains. It will then materially cheapen the means of transportation, both of freight and passengers,

and having done that you can say that we will give you so much, and then as it progresses this way so much more for every ten miles further, until the amount which you are willing to appropriate shall be exhausted. You can feel entirely sure that after the road has reached the summit it will come this way as far and as fast as the means of the company and the labor of men will permit. So far as the Government aid is concerned, the Government assistance, with a mortgage of \$32,000 a mile, will afford means amply sufficient to construct the road through your territory. Whenever it reaches the line, how fast it shall progress easterly is only a question of how fast the track can be laid, because the grading on the line selected can always be kept far in advance of the track.

The State of California last winter provided by law for the payment of the interest on a million and a half of the bonds of the company for twenty years. That is a very great and material assistance, not only because it pays the interest, and so far relieves the Company, but also because it tends to strengthen the credit of the Company, and so give confidence to others who might desire to invest in the stock of the Company, which is a very great point in any assistance of a public nature which may be given to the road.

The present Company has constructed thirty-one miles of road, and they have purchased the iron and rolling stock necessary for sixty miles, all of which is paid for, and most of which has been delivered. The freight money alone, on the material shipped from New York to San Francisco, which we have paid out, has amounted to over \$250,000 up to the present time. The Company owes no floating debt; all of its contractors are paid; every article for the road, all of its supplies and the iron and the rolling stock for the first sixty miles, are paid for, and the Company owe nothing except the first mortgage bonds of the road, amounting to a million and a half of dollars, not all of which, however, have yet been negotiated.

So far, this work has been done by the subscriptions of the individual stockholders, and the assistance derived from the subscription of the county of Sacramento, amounting to \$300,000, and the subscription of the county of Placer, to the amount of \$250,000. Most of the county bonds are yet owned by the Company. None of the State or National aid has yet been received by the Company, but nearly all that has yet been done has been done by the individual subscriptions of stockholders. Thirty-one miles of first-class road have been constructed, and we are supplied with all the rolling stock and iron necessary for sixty miles. This, in brief, is the present condition of the road.

So far as the route is concerned, we took a great deal of pains to ascertain which was the best route. I, myself, wrote a great many letters to different men who were acquainted with various passes through the mountains, and we made a reconnaissance of the different routes supposed to be practicable, and finally became



entirely satisfied that the route selected is altogether the best; allowing the road to be constructed at much less expense, and in much less time than by any other route.

Now allow me to say this—and I only know what the action of the Convention has been on this subject, by what I have seen in one of the papers—that you propose to give your aid to the road, only after it reaches the Territory, and then to the first road that shall reach it. Allow me, very respectfully, to say, that in my opinion, that action, instead of aiding the road, is calculated to delay its construction, because you thereby raise a doubt as to whether or not this road, which Congress has aided, which the State of California has aided, which the counties of Placer and Sacramento have aided, and which the county of San Francisco will aid, either to the extent of \$400,000 without taking stock, or by a subscription of \$600,000, is a practical route or not. And you also say to people abroad, when we go abroad to negotiate our securities, that there is a doubt whether we have got the best route or not; and more than that, that there may possibly be a parallel and rival road constructed. To the extent to which you throw a doubt upon this being the only route, when we go into the market to negotiate our securities, or to sell our stock, to that extent you depreciate their value, and to that extent, of course, you prevent the construction of the road.

Now, gentlemen, if ever a railroad is to be built over the mountains—and I trust it will be inside of three years, because I know it is entirely practicable—it will be that one which has received the National aid. Congress, while it donates in aid of the Pacific Railroad over one hundred millions of dollars, and gives it thousands of acres of land to the mile, operates through the various companies already in existence, one of which is the Central Pacific Railroad Company of California; and whatever is done to assist those Companies, to that extent co-operates with the efforts of the General Government, and whatever is done to antagonize the efforts of one of those Companies, to that extent, of course, antagonizes the efforts of the General Government to build the railroad. This is, in brief, the view which I take of this subject. I do not desire to occupy your time by making a speech. It is a question of importance, it is true, but I think it better that we should have rather an individual and conversational meeting, than that I should endeavor to make any formal speech. I should be pleased to hear the views of members, and I will endeavor to answer any questions which gentlemen may see fit to put to me.

Mr. FITCH—I will ask Governor Stanford, what is the average estimated cost, per mile, of building the road from Sacramento to the State Line?

Mr. STANFORD—The original estimate made by Mr. Judah, the chief engineer, who made the surveys, was, that it would cost between twelve and thirteen millions of dollars; that, however, was prior to any action of Congress giving assistance to the road, and it was not then contemplated to build so good a road as the Act of Con-

gress requires. That requires a first-class road, in every respect. A road might be built which would, to some extent, answer the purposes of a railroad, at some less expense. Since that time there never has been a complete estimate of cost for a first-class road, such as we are building.

Mr. DE LONG—I will ask the Governor this question. What do you suppose the bonds of the State of Nevada for \$3,000,000, at 7 per cent. a year interest, could be negotiated for abroad, without a railroad running to our borders?

Mr. STANFORD—Really, Mr. De Long, without a road at least contemplated, they would be very low in the market, in my opinion.

Mr. DE LONG—Do you think they would sell in the aggregate for more than \$750,000?

Mr. STANFORD—Yes, sir, I think they would realize over that amount, and certainly with the prospect of a Railroad; because, the moment it is certain that a railroad will be constructed, as it is well known that you have mines here which that road will supply and develop the credit of the State would be enhanced. In view of the number of mines now undeveloped, or partially developed, the fact that the road is to be built would give your bonds a very good standing in the market.

Mr. DE LONG—How far from the present terminus of the road is the summit?

Mr. STANFORD—It is one hundred and four miles from Sacramento to the summit.

Mr. DE LONG—Then it is forty-four miles from that point on the road to which you have the necessary supplies of iron and rolling stock to the summit. Is there only one summit on your route?

Mr. STANFORD—There is only one to pass over. Through the eastern summit the Railroad follows the outlet of Lake Tahoe. It comes through the eastern summit with a descending grade of forty-two feet to the mile.

Mr. WARWICK—I desire to ask a question. Do you not think that if the rate of interest on the negotiable paper of the State of Nevada were ten instead of seven per cent. it would be much more easily negotiated than at the rate proposed, which is seven per cent.? and also that it would bring a better price?

Mr. STANFORD—Oh, certainly.

Mr. NOURSE—Suppose we could not pay—and it is well known we could not pay—seven per cent. interest, would it make the bonds any more negotiable to fix the rate of interest at ten per cent.?

Mr. STANFORD—In that case I should suppose not.

Mr. FITCH—Does not Congress restrict the rate of dividends on your stock to ten per cent.?

Mr. STANFORD—Whenever it is above ten per cent. Congress reserves the right to restrict and limit it.

Mr. FITCH—I suppose that is the difficulty in regard to the subscriptions in California?

Mr. STANFORD—Not altogether, Mr. Fitch. The difficulty is this: this Company has the right to continue the building of this road until it meets the other road coming from the East, and of course there will be no cash dividends

until that time, as all the means of the Company will be used in pushing the road toward the East.

Mr. COLLINS—I understand that California, by her enactments, agreed to pay the interest on the bonds of the Company to the amount of a million and a half of dollars for twenty years to come.

Mr. STANFORD—Yes, sir; the interest being at seven per cent. per annum.

Mr. COLLINS—The State does not propose to pay the principal then?

Mr. STANFORD—No, sir; the Company pays the principal. The payment of interest by the State makes the bonds very desirable, and it is practically about as much assistance to the Company as if the State paid the principal. It not only makes the bonds good, but it strengthens the stock of the Company.

Mr. COLLINS—What is the highest grade in crossing the summit which the Company will have to overcome? I mean the maximum grade; how many feet per mile?

Mr. STANFORD—The maximum grade is one hundred and five feet to the mile.

Mr. COLLINS—You now have thirty-one miles completed. What is the highest grade on that distance?

Mr. STANFORD—We have four miles of the maximum grade of one hundred and five feet, and there are three miles of between eighty and ninety feet grade to the mile.

Mr. COLLINS—I believe there is to be an extensive tunnel somewhere near the summit; is there not?

Mr. STANFORD—The longest tunnel on the route, according to our surveys, is 1,050 feet, and that will take us more time than any other one mile on the road; but our engineers are confident that they can run it inside of fifteen months.

Mr. COLLINS—Is that at the summit?

Mr. STANFORD—No, sir; it is about seventy-eight miles from Sacramento.

Mr. COLLINS—What is the number of tunnels that the Company will have to make?

Mr. STANFORD—I do not know. The tunnels which we originally contemplated, we find on a more careful survey are generally thrown out, and this tunnel of 1,050 feet our present engineer thinks he can throw out entirely by a little more curve.

Mr. COLLINS—Without any more grade than one hundred and five feet to the mile?

Mr. STANFORD—Yes, we limit the grade to that; we are limited, by Act of Congress, to that of the Baltimore and Ohio road, the maximum grade of which is one hundred and sixteen feet to the mile; but we find that it is not necessary to have any grade of more than one hundred and five feet to the mile.

Mr. TOZER—I understand you to say that no part of the Government aid has thus far been used in the construction of the road?

Mr. STANFORD—Not a dollar.

Mr. TOZER—Then what are the contingencies? Can you depend upon the aid being granted to this road rather than to any other?

Mr. STANFORD—Yes, sir; because, in the Act of Congress, the Companies to build the road and receive the donations are specified by name. The Central Pacific Railroad Company was organized under the laws of the State of California, and was in existence anterior to the passage of the Act of Congress; and if you will observe—I have the Act here—that Company is recognized in the Act of Congress, and the five Companies named are the only ones that, under the Act, can derive any aid—three on the Eastern end, including the branches there, and then the Union Company, and the Central Pacific Company, on this end. These are the only ones which can receive any of the aid. The donations are specifically made to them. The Central Pacific Company has the right to build eastwardly until it meets the other Companies.

Mr. TOZER—How soon then do you think the road on this side can demand and receive any portion of the aid of the Government?

Mr. STANFORD—Our Company is in a condition to demand a portion of the aid immediately. Under the old law which provided for the construction, after forty miles had been completed across the plains, it was provided that there should be an appointment of Commissioners, and until such Commissioners had been appointed, and had reported, we could receive no assistance from the Government; but it allowed the bonds to be issued for every twenty-five miles in the mountains. Now, our road commencing at Sacramento runs into the mountains very soon, but there is no provision for granting us aid until we shall have forty miles constructed. But the Act of last winter, I understand, provides for the appointment of this Commission at once, and then we shall get the aid immediately.

Mr. FITCH—I understand you to say that \$48,000 per mile will be received from the Federal Government; that the company have permission to raise \$48,000 per mile more on the road, in anticipation of the Government aid, besides the aid of a million and a half from California, and the aid of \$400,000 or \$600,000 from San Francisco, and the aid also of \$250,000 from the County of Placer, and the \$300,000 from Sacramento County. I understand that you have all this aid from the counties as well as from the State, and that in the expenditure of this aid you are restricted to the State line.

Mr. STANFORD—The Pacific Railroad Company, so far as its first organization is concerned, had only the right to build to the State line; it was only organized for that purpose, but by the Act of last winter, we have the right so far as the State could confer it, to build eastwardly, and the National Government has also conferred the right to do so.

Mr. FITCH—I understand that the money given by San Francisco, and by the State, and by these counties, can be expended either within or without the State of California, as the Company pleases.

Mr. STANFORD—Yes, sir, the entire subject is under our control.



Mr. FITCH—I believe you did not state the amount of the estimated cost per mile.

Mr. STANFORD—It will probably cost at least twelve or thirteen millions of dollars for the construction of a first-class road to the State line.

Mr. DE LONG—Inasmuch as the appropriation heretofore proposed by the Convention is not agreeable to you in its present form, and inasmuch as if we make a direct issue of three millions of dollars in bonds, it will not be worth much—take either horn of the dilemma—what is it the wish of the Company that we should do? Let you alone?

Mr. STANFORD—I would prefer that you should let us alone rather than provide that the State shall grant assistance to the first road that comes to the State line, and thereby impair confidence in this route.

Mr. DE LONG—We want to stimulate strife.

Mr. STANFORD—You can hardly expect to get two roads built across the mountains, Mr. De Long.

Mr. DE LONG—We do not want more than one, but we want that as soon as possible.

Mr. STANFORD—There is no doubt but what the road that comes across the mountains will be that one which the Government aids, and this is the only Company now organized with a view to construct a road over the mountains. There is no other company organized for that purpose, and nobody else has proposed to construct a road further toward the Territory than Placerville. So far as our present information goes, we do not know that any other road will ever attempt to cross the mountains.

Mr. DE LONG—Then I understand you to say that you prefer that there should be no donation at all rather than to limit it as this proposition is now limited?

Mr. STANFORD—I do not know exactly what you have done.

Mr. DE LONG—We propose to give \$50,000 a mile for every mile of railroad that shall be built within our Territory, to the company which shall first construct a road to this Territory, which shall connect us with navigable waters. That proposition is contained in our constitutional provision as it stands now. We have either got to make the appropriation outright, to leave it for the company to call for the first appropriation in bonds which shall first reach our borders, or else to make no appropriation at all. Which of the three measures would you advise?

Mr. STANFORD—With the exception of the implied doubt as to the company which has the ability to construct the road, there is no particular objection that I see. Of course, when we get our road over here we should be very glad to receive this aid to construct the road along through the Territory, as our hope is not to be delayed too long in getting across the mountains. But as I said before, the loan is not really necessary to get across the Territory. The Government aid being a second lien, makes the mortgage bonds of the Company good, and that insures the completion of the road across the

Territory as fast as the track can be laid, so soon as once the mountains are overcome.

Mr. DE LONG—Then the proposition would suit you very well if that part was stricken out which provides for giving it to the first company, thus leaving out the doubt as to whether or not there can be another company or road which is likely to cross the mountains first.

Mr. STANFORD—That would suit us so far as going through the Territory is concerned, but really that is no concern to the Pacific Railroad Company, because the Company is confident of its ability to push the road after we once reach the State line, as then the difficulty of crossing the mountains will be entirely surmounted.

Mr. DE LONG—Then you ask that whatever appropriation is made shall be made so as to be available as soon as possible, so as to allow you to use it on the mountains or elsewhere, as you please.

Mr. STANFORD—Yes, sir.

Mr. DE LONG—Would it be any advantage to you to appropriate three millions in bonds that would not sell for over \$150,000?

Mr. STANFORD—It would only aid the road to that amount, and that would be too great a sacrifice to make; but I think, nevertheless, that with the prospect of a railroad reaching the Territory at an early day, we may be quite confident that these bonds would stand well in the market, because not only yourselves here but the people in California, and in fact the whole world, have a very high estimate of the natural resources of your Territory, and the moment you have a reasonable means of communication for freight and passengers, you must have a population, and the bonds of the State of course will be valuable. But after all, while we are coming over the mountains is the time to give us effectual assistance. As to whether the bonds should be issued or not, is another question. You are as much interested in the bonds as the Railroad Company is, but if you prefer not to issue the bonds I can only say that the people of the State of Nevada would be very welcome to take stock in the road, and they could assist us in that way.

Mr. DE LONG—We should object to this issuing of \$3,000,000 in bonds, if it is not going to do considerable good.

Mr. STANFORD—You could give the aid in a very efficient and acceptable shape by providing for the payment of the interest on the bonds of the Company as California has done.

Mr. DE LONG—To what amount?

Mr. STANFORD—As much or as little as you choose.

Mr. KINKEAD—When will the road be finished as far as you have the material now on hand?

Mr. STANFORD—During the coming winter, we expect. Allow me to state why it has not gone forward faster this spring and summer. We have as yet received nothing from San Francisco, nor from the National or State aid; neither have we made a mortgage such as was contemplated by the California Legislature of last win

ter. There is a million and a half, of course, of very desirable securities which we could place in the market, but we have not done so because we did not know exactly how it should be done until Congress should take the action which it did take at the last session. Now, as soon as we receive the bill passed by Congress and get all the details, we shall make that mortgage and of course we shall push the work forward. It will take only about six months to complete that portion of it after we fairly set to work.

Mr. KINKEAD—That is, if you get the means.

Mr. STANFORD—With the State aid and our assets we are abundantly able to complete the sixty miles.

Mr. FITCH—Do you propose that these bonds which you are about to issue shall be first mortgage bonds?

Mr. STANFORD—Yes, sir.

Mr. FITCH—Then the State guarantees only the bonds?

Mr. STANFORD—No, sir. The State only pays the interest for twenty years. It actually pays that interest, so that, in addition to the credit of the company as a guarantee, we have for the interest the credit of the State.

Mr. KINKEAD—The State does not pay the principal?

Mr. STANFORD—No, sir. That is to be paid by the Company.

Mr. PARKER—Is there any company which has a charter from the eastern line to California, already granted by the Nevada Legislature, through the Territory?

Mr. STANFORD—No, sir.

Mr. HAWLEY—That is a question which I wished to ask. I do not quite understand whether any contingency could arise by which the aid granted by the United States could be received by any other company.

Mr. STANFORD—No, sir; except that Congress may repeal or modify the act, which is not very likely. Under the act of this winter, however, they have reserved the right to repeal or modify it.

Mr. HAWLEY—Then no other company can receive it on the western slope?

Mr. STANFORD—No, sir.

Mr. HAWLEY—That question arose on the framing of the language of the section. The language employed was "Some one company," and I opposed it because I thought it was leaving the matter open for the purpose of exciting a contest between the companies. So far as I am concerned, I was willing that the aid should be restricted to the Company which you represent, provided there could be no such condition of affairs that the Government aid could go to some other company.

The PRESIDENT—I would like to ask Governor Stanford a question. How far has the line of the road been surveyed or located?

Mr. STANFORD—To the State line, or rather to the Big Bend of the Truckee.

The PRESIDENT—Do you regard the summit as the State line?

Mr. STANFORD—No, sir. We strike the State

line about four miles from where the Hennes<sup>s</sup> Pass road crosses the Truckee river.

The PRESIDENT—Do you recollect the distance in miles?

Mr. STANFORD—The distance as we ran it originally was 144 miles. To the summit the distance was 104 miles.

The PRESIDENT—It has not been surveyed and located beyond that point to the east?

Mr. STANFORD—Yes, sir, to the Big Bend of the Truckee.

The PRESIDENT—What is the capital stock of the company?

Mr. STANFORD—Eight millions of dollars?

The PRESIDENT—How much has been subscribed?

Mr. STANFORD—Between \$800,000 and \$900,000 by the individual stockholders and \$250,000 by the county of Placer, and \$300,000 by the county of Sacramento.

The PRESIDENT—What amount of that capital has been actually paid in?

Mr. STANFORD—Between \$500,000 and \$600,000. The Government aid, you will see very readily, can in no manner be diverted from the Central Pacific Railroad, except through its own lapses. Under the recent Act of Congress, the time of the construction has been extended so as to require 25 miles to be completed next year, 25 miles the year thereafter; and it is for the interest of the Company to push it forward as fast as they have the means to do so, and the earlier it is completed the better.

Mr. DE LONG—Then I understand that the Company would rather we should guarantee the interest on the bonds of the Company, than to give the bonds of the State?

Mr. STANFORD—No, we would rather have the bonds.

Mr. DE LONG—If we give you \$210,000 annually, as a donation, which is the interest on \$3,000,000 of bonds at 7 per cent., that would be double the amount which California has given, or nearly so?

Mr. STANFORD—Allow me to say, that I have entire confidence that the stock of the Company will eventually be very valuable, and I cannot ask for the assistance of any State, except so far as it may be necessary to secure its construction, and if the Territory of Nevada, or the State of Nevada, when it becomes a State, agrees to pay the interest on the bonds, which would make them about as good in the market as if the State gave her own bonds—in other words, it would furnish about the same amount of means toward the construction of the road; that is really all the Company can ask. We do not ask anything to save the stockholders—nothing except to inspire confidence; to make the credit of the Company good abroad.

The PRESIDENT—The bonds of the Company bear interest at 7 per cent, and the Sacramento and Placer county bonds alike rate, do they not?

Mr. STANFORD—No, sir; the bonds of Sacramento and Placer counties bear 8 per cent. interest.

Mr. EARL—Where is the western terminus of the road?



Mr. STANFORD—Under the organization of the Company, it was the State Line.

Mr. EARL—No! No! I mean the western terminus.

Mr. STANFORD—Oh, the western terminus; under the Act of Congress, it is a point at or near San Francisco, or the navigable waters of the Sacramento river.

Mr. EARL.—Is not the terminus to be at Goat Island?

Mr. STANFORD—I am not fully posted here. I have not seen the amended bill, but I think it provides for an organization to run a road from Sacramento to Goat Island. The Company has a right to construct a railroad to San Francisco, if it chooses to do so.

Mr. EARL—By this language, if it be construed that this is the road which is to get the land from the Government, will not the doubt arise as to whether you would get the aid from the counties, and also from San Francisco?

Mr. STANFORD—So far as relates to the construction of the road to San Francisco, there may be some doubt; but over the mountains, there is no doubt whatever, because the Act of the Legislature provides specifically that \$600,000 shall go to the Central Pacific Company, and \$400,000 to the Western Pacific Railroad Co.

Mr. CHAPIN—What is the distance from the head of the Truckee Valley to the summit, or somewhere there?

Mr. STANFORD—I think it is some 42 or 43 miles.

Mr. CHAPIN—If that summit were the State Line, all that 40 miles would be in this Territory?

Mr. STANFORD—Certainly; the line of the railroad follows the Truckee, down a rather crooked course for a great many miles. We found that some gentlemen were constructing a wagon road through there, and their original idea was to bring it down to the Truckee directly, but they found that the distance would be no less than by taking the Henness Pass route, and striking across Dog Mountain. All the difficulty is on the mountains. There is an opening in the mountain there, and from there down to O'Neal's there is no trouble about the road. All the difficulty is in the mountains, and it is all passed when you get to the State Line.

Mr. COLLINS.—I understood that the road would have been completed before this time, but for the want of funds?

Mr. STANFORD—Yes, sir.

Mr. COLLINS—I understand there has been some embarrassment in the operations of the Company, or that the progress of the road has been delayed?

Mr. STANFORD—Only delayed; the Company has not been embarrassed.

Mr. COLLINS—I hear it has not gone ahead as fast as it would have gone, if there had been funds enough?

Mr. STANFORD—No, sir. You see we were practically more than six months removed from the source of supplies. The ground was broken for the construction of the road a year ago last January, but we had to go East and purchase iron and rolling stock, and from the time we started, inde-

pendent of the time we were necessarily delayed in negotiating, somewhat more than six months were consumed in the purchase and transportation of the material. Indeed, some materials which we purchased a year ago, and paid for at the time in the securities of the Company, have not yet arrived. We were delayed some time in getting our locomotives; the Government was requiring the services of most of the effective force in building locomotives for its own use, and we could only get them at such times as they could be afforded by the Government.

Mr. COLLINS—Do you think that if this State shall give bonds for one, two, or three millions of dollars, or agree to pay the interest for an indefinite period of time on the bonds of the company, that would really facilitate and hasten the completion of the road across the mountains?

Mr. STANFORD—It would very much.

Mr. COLLINS—Probably how much time would it forward the completion of the road?

Mr. STANFORD—Well, I feel entirely confident that if the State shall pay the interest—not guarantee it, because I do not consider that that would be any very great assistance, for we never intend to have the bonds come to protest, and a guarantee therefore would be very little assistance—but if the State paid the interest, it would be a very great assistance, and practically nearly to the same extent as though the State issued her own bonds. You will consider this, that we have thirty-one miles already constructed and paid for, and the rolling stock and iron for sixty miles already provided, and we owe nothing for all that except a few first mortgage bonds, a million and a half of which we have issued, but only a portion of that amount have been negotiated, and everything else in the way of assistance is untouched. Besides we have the interest on our bonds to the amount of one million and a half of dollars paid by the State of California.

Mr. KINKEAD—Is that a donation?

Mr. STANFORD—Yes, practically, with the exception that we do some services for the State as a consideration. Things which are to go to the State Fair are to be carried free, and arms, and munitions of war, etc., are to be transported free. We issue our own bonds whenever we please, and we are able to put the bonds into the market at once, and then almost immediately we will be able to derive the benefits from the Congressional aid on the thirty-one miles which we have completed. We will have that aid to assist us in completing the work. We can make our first mortgage bonds equal to \$48,000 per mile on the thirty-one miles completed. There is besides the \$400,000 which we are about to receive from San Francisco, if the compromise now proposed shall be carried out in good faith, as I think it will be; and if it is not carried out, then we shall receive \$600,000 in bonds from San Francisco, giving in return \$600,000 in stock, and these are the immediate assets of the Company for the prosecution of the work. Now, if this Territory, on becoming a State shall promise to pay the interest on the bonds of the

Company to any extent, to that extent the bonds would become very marketable. They would be good securities and bring a good price in the market at once, and in addition you will see the advantage of all these donations made directly to the Company by strengthening its standing abroad. The effect is that you make the stock desirable. Our idea is to push forward the work as rapidly as possible, and when we get it completed for a distance of seventy or eighty miles, we shall have demonstrated, not only the practicability of the enterprise, but also that it has a practical value as an investment, so that we shall have no difficulty in selling our stocks, and thereby realizing a large amount of funds with which to finish up the road.

Mr. NOURSE—What effect upon any guarantee or agreements to pay interest on the bonds of the Company would the exemption of mines from taxation have?

Mr. STANFORD—I do not know what would be your means of raising a revenue in that event.

Mr. NOURSE—Are you much acquainted with the means of raising revenue which the Territorial possesses?

Mr. STANFORD—I am somewhat.

Mr. NOURSE—Have you noticed the expenditures and the income for the last year under the Territorial organization?

Mr. STANFORD—Well, not particularly.

Mr. NOURSE—Are you aware of the fact that with the Federal Government paying the Federal officers we have already run behindhand—that we are already \$250,000 behindhand, independent of city and county indebtedness?

Mr. STANFORD—I was not aware of it.

Mr. NOURSE—Are you aware that the expenses for fourteen months, which includes only \$1,600 of interest, amount to nearly \$600,000, with an income of only \$44,000?

Mr. STANFORD—I was not.

Mr. NOURSE—With these facts carried before Wall street brokers, with this insight into our financial affairs, what do you think would be the probability of negotiating our bonds at a figure to make it a paying operation?

Mr. STANFORD—I do not think that showing would materially affect the bonds.

Mr. NOURSE—Suppose you had the further fact that, notwithstanding the small amount of income, the people of Storey County, our most wealthy county, were taxed \$2 70 on every one hundred dollars worth of property for the past year, and that out of all that we get only a small per centage for State purposes?

Mr. DE LONG (in his seat)—Oh, that is nothing for a Sacramento man to consider!

Mr. NOURSE—Suppose that fact were known, and it were also understood that we as a Territory had run behindhand \$244,000, and that the Territory had only an income of about \$44,000 a year—suppose, I say, it were known that the expenses were so much larger than the income, as shown by these figures, what would be the advantage to you of that agreement on the part of this State to guarantee or to pay the interest on your bonds?

Mr. STANFORD—I think you hardly put the case fairly. If the revenues of this State were not to be largely increased, of course there would be no great value in its securities. But so far as the rate of taxation is concerned, you should consider it in proportion to the rates paid for the use of money, which is often 3 and 4 per cent. in this country. I believe  $2\frac{1}{2}$  per cent. is about the usual monthly rate here, and compared with that the rate of taxation is very light. It cannot be more in proportion than  $1\frac{1}{2}$  or 2 per cent. per month interest, and yet there are cities and towns where people pay taxes amounting to 3, 4 and 5 per cent.

Mr. NOURSE—Would it not be of more advantage to your Company, as regards giving you credit abroad and assuring the desirability of your stock, if it were known that after, or soon after, this Railroad should reach the State line—which would develop our resources and give us a population, thereby rendering the State able to do something—that then the State would give you outright the amount of three millions of dollars, at the rate of fifty thousand dollars a mile—that the State would not lend, but give it outright? Would not that help you much more than it would to give you our bonds now, or as soon as we get to be a State, and with our present condition of finances?

Mr. STANFORD—I think not; because abroad, where most of the securities must be negotiated, the great point is to inspire confidence that the road will be constructed over the mountains, and there will always be a doubt until the ability of the Company is made apparent. It is necessary not only that the Company should have the ability, but also to make that ability apparent to the parties with whom we have to deal.

Mr. HOVEY—I would like to correct the gentleman from Washoe [Mr. Nourse] in one respect. The County of Storey alone has paid \$57,000 into the Territorial Treasury during the last year.

Mr. CHAPIN—With many thanks to Governor Stanford for the valuable information he has given us, I suggest that we now proceed to regular business.

Mr. COLLINS—I propounded one question to the Governor, but his attention was diverted from it so that he did not answer it. My question was this: How much by the appropriation or provision for the loan of the credit of the State, or a guarantee of the bonds of the Company by the State, say for a certain definite period, to an amount of one, two or three millions—how much by that means would we be enabled to hasten the completion of the road to the State line? Would it hasten it one year—a year and a half, or six months? For instance, suppose when it reaches a point sixty miles this side of Sacramento we guarantee the payment of 7 per cent. on one million; when it arrives at a point eighty miles this side of Sacramento, a million more, and when it arrives at a distance of one hundred miles from Sacramento, or at the State line, a million more?

Mr. STANFORD—Of course I can only approximate to it, but I will say this: that with the knowledge of the fact that this State would give



the interest upon a certain amount of bonds, we could proceed with entire confidence in the expenditure of the money raised on the bonds which we are already authorized to negotiate at the present time. By the time the road is constructed up to about sixty miles from Sacramento, the balance of the road, to fifteen miles from the summit, might be ready for the track, and when that is done there is no one section that has any obstacle to delay it. We could proceed at once to use the present securities with entire confidence, knowing that by the time they are exhausted we shall have reached a point where we may receive the aid from this State; and these bonds would be negotiable in the market. Therefore I think that with that assistance we could construct the road as fast as any adequate amount of means would permit, and we could finish it inside of three years probably.

Mr. COLLINS—Do you think that this aid would give us the road one year sooner than we could have it without?

Mr. NOURSE—Do you mean by the payment of the interest or the agreement to pay it?

Mr. COLLINS—I mean not an agreement only, but the actual payment of the interest.

Mr. STANFORD—I must say that I could not say that it would make a difference of a year. It might make more difference, but I should be surprised if by some means we do not push the road forward to this Territory inside of three years. It is my ambition to do so. But the great object, as I have said, is to inspire confidence abroad.

The PRESIDENT—Do not you think that this road will be constructed without any aid from this Territory?

Mr. STANFORD—I think it will be, but perhaps not so soon.

The PRESIDENT—Then with this guarantee of interest at 7 per cent. on the bonds of the Company, how much sooner could that road be constructed to the State Line, than it would otherwise be?

Mr. STANFORD—It is very difficult for me to say, because so much depends upon our foreign relations, and the conditions of the whole country. The standing of our bonds and the standing of the Government bonds will have to be governed by events in the future; of course, what will be our condition in the future, it is impossible to say; nor how our securities are going to stand within a certain length of time. But this is certain: that if this State comes in and lends her aid, to the extent that she gives that aid, it will help the road; and more than that, it will strengthen the bonds of the Company abroad, and also the stock. For instance, if the road were to cost three millions, with a million and a half of aid, you will enable us to build the whole of it, because the amount required to build a portion of the road secures the construction of a good deal more. Whatever is donated becomes a security for nearly an equal amount in addition, so that the donation of a million and a half from the State, becomes equal, so far as the construction of the road is concerned, to nearly

three millions of dollars. Then, in addition to that, the road having received the donation makes the stock of the Company more desirable in the market, and in that way the resources of the Company and its means to build are increased. I may say, that a million and a half donated by the State, equals twice that amount toward the cost of the construction of the road.

The PRESIDENT—Then three millions would be equivalent to six millions toward the construction of the road?

Mr. NOURSE—I wish to ask one more question. What is the shortest radius of any curves on your road, and whereabouts do they occur?

Mr. STANFORD—As to the curves, our shortest is a 500 feet radius, although we run out of Sacramento, at present, with a curve of 225 feet radius.

Mr. NOURSE—Do these curves come upon heavy grades?

Mr. STANFORD—Some of them; yes, sir. Of course we avoid having curves upon sharp grades as much as possible, but we reach the elevation of 7,030 feet in a distance of 104 miles, so that the grade is very regular. We have curves of this kind for at least four miles on the maximum grade, on the part we are now running, but only one engine is required to surmount these curves. The locomotive Pacific, which is not so large as one we have coming out, drew up to Newcastle, one train containing over 400 passengers, with only 100 pounds of steam. There were eight cars, and each had about sixty passengers.

Mr. NOURSE—One engine hauled the train up the 105 feet grade?

Mr. STANFORD—Yes, sir; I was on the engine at the time. We had only 100 pounds of steam on and sometimes a little less. We had certainly over 400 passengers on the train.

Mr. COLLINS—One object in postponing the issue of the bonds was the idea that the State would be in a better condition at a future time to meet the issuing of so large an amount than it is at present. As you rather demur to the action of the Convention, I would ask which would be most agreeable to the Company—for instance, to issue the bonds from time to time, as the work progresses on the other side, until the road reaches the State line, to make the payment from time to time until a million and a half is paid or until the road is completed, or to pay the interest on the million and a half of bonds as they are issued by the Company?

Mr. STANFORD—The object is, to get across the mountains. I will say this, that if the State is not to issue the bonds until seventy miles of road are completed, the State will then certainly be in the receipt of considerable benefit from the road. In the next place, when we reach the seventy miles and make the proper proofs then only the Company may issue the bonds guaranteed by the State, and the first installment of interest probably would not be payable under six months at any rate from that time, so that it would necessarily take a considerable time before the State could be called upon to pay anything at all. And long before she would be called upon to pay them, she would



be deriving far more than an equivalent in the way of benefits from the road. For instance, now there are six daily coaches running from the termini of the railroads running from Sacramento towards this Territory, and the probability is that these coaches take fifty passengers up and carry fifty passengers down at a cost of about \$25 for each passenger, so that there must be \$2,500 a day paid out by the people of this Territory for passengers alone. Now, the most we could charge under the laws of California would be ten cents a mile for passengers and fifteen cents a ton for freight, and the Territory would save on passenger travel alone not less than the handsome sum of \$300,000 a year, even if the railroad company should charge the maximum prices allowed by the law of the State of California.

Mr. CHAPIN—Have you any reliable data in regard to the amount paid for freight and for passengers during the last year, to and from California?

Mr. STANFORD—We have got such estimates as we could on that subject from several firms in Sacramento, and also in regard to the teaming across the mountains. The amount paid out in Sacramento for freights, the past year, was from ten to twelve millions of dollars, and Mr. Swain, a large wagon road owner, estimates it at twelve millions. I know that Whitney & Co. of Sacramento, some time along last fall—in November, I think it was—showed us their books, and also made an affidavit to the effect that they had paid out for goods forwarded from there during the season over \$1,700,000; that was from one single firm. D. W. Earl & Co. have paid out probably about the same amount.

Mr. NOURSE—Are not these the principal firms?

Mr. STANFORD—There are several firms which do about as large an amount of business.

Mr. DE LONG—And many goods are sent here from Marysville also.

Mr. STANFORD—I did not take any account of the Marysville trade, though I know there is a vast amount of goods shipped from there to the Territory. Taking the amount of freight brought by the several routes last year, as a basis, the railroad line would probably save to the Territory at least eight or ten millions of dollars a year. That is according to the best data we can obtain. And it would save about two thirds on the bullion shipped. I do not remember the exact amount of bullion. We have had the wagon roads estimated from the tolls received.

Mr. NOURSE—You add them to the estimate of the amount shipped in Sacramento?

Mr. STANFORD—No sir; that is independent of these estimates. Mr. Swain's estimate of the whole was twelve millions of dollars.

Mr. NOURSE—Probably, on the other hand, Whitney & Co. and D. W. Earl & Co. forwarded about a quarter of the whole amount shipped last year.

Mr. STANFORD—Probably not a quarter, as a large amount comes also from Stockton, such as the produce of the farms—barley, hay, a great deal of flour and some merchandise, which does not come by that road at all.

Mr. TOZER—And a great deal comes by the Henness Pass route, does there not?

Mr. STANFORD—A very great deal, and a great deal also from farms along on the road.

Mr. TOZER—Could not most of the amount proposed to be guaranteed be saved to the State in the way of fuel?

Mr. STANFORD—I should say it could. You have got in your Territory boundless resources; you have plenty of mines which would pay reasonably were the cost of working them reduced to a smaller amount; but you have not got many mines which will with the present cost of the reduction of the ores. The consequence will be, without a railroad, that very soon the production will be confined to the principal mines; prospecting will die out, and your population will come to consist only of those who are engaged in working the more valuable mines and those connected with them. But when you can transport your freight and your fuel at reasonable rates; when you can send your ores to the Truckee, or get your wood brought cheaply to your mines, you can then support an almost indefinite amount of population.

Mr. PROCTOR—How far has the road progressed already?

Mr. STANFORD—Only thirty-one miles as yet.

Mr. PROCTOR—Are there any men at work on the road now?

Mr. STANFORD—Yes, sir; a small gang of men at Auburn, where we have a heavy cut. We have a few men at work upon that. I feel myself greatly obliged to the gentlemen of the Convention for the kind attention they have given me, and I will trespass no further upon their time.

Mr. CHAPIN—I move a vote of thanks to Gov. Stanford for the valuable information he has given the Convention.

The question was taken, and the motion was agreed to.

Central Pacific Railroad Company.

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STATEMENT

MADE TO

SENATE COMMITTEE

OF THE

NEVADA LEGISLATURE.

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JANUARY 14, 1865.





# RAILROAD RESOLUTIONS

OF THE

## SENATE OF NEVADA.

The following resolutions were, on the 7th day of January, 1865, offered by Senator Sumner, and adopted by the Senate of Nevada. The President of the Senate appointed Messrs. Sumner, Slingerland, Harris, James and Larrowe, as the Committee named therein :

*Resolved*, That a committee of five be appointed by the President of the Senate, whose duty it shall be to take into immediate consideration the prospective interests of the State of Nevada ; said committee especially to ascertain and fully report to this Senate, what progress has been made, and what work is being prosecuted by companies organized and operating under the " Pacific Railroad Act," passed by Congress and approved in the year 1862 ; what the cost of the work completed by these companies, and what estimates of cost have been obtained as basis for future work, on the proposed route of any such companies ; what the aid received, solicited, or publicly expected by said companies outside of the National aid afforded through the " Pacific Railroad Act ;" and said committee shall also report as to whether any other companies or associated capitalists than those included in the above description, propose the building of a railroad to the Nevada State line, from navigable tide-water in California, and shall gather and duly report all such information in regard to this matter as may, by the committee, be deemed advisable. And said committee shall report advisingly as to what action should be taken by the Legislature of Nevada, at its present session, to promote or inaugurate practical work for establishing railroad communication between navigable tide-water in California, and the principal town in Nevada.

*Resolved*, That this committee have power to send for persons and papers, and administer the oath to parties who may come before the committee to testify ; *provided*, no expenses shall be incurred under these resolutions without special authority



therefor having been first obtained from the Senate, on a motion before the Senate calling for such authority, and specifying the reasons for such call.

## STATEMENT OF THE CENTRAL PACIFIC RAILROAD COMPANY OF CALIFORNIA.

OFFICE OF THE CENTRAL  
PACIFIC RAILROAD COMPANY OF CALIFORNIA. }

SACRAMENTO, January 12, 1865.

*The Hon. Messrs. Sumner, Slingerland, Harris, James and Larrowe,  
Committee, etc. :*

GENTLEMEN : We notice in the newspapers that you have been appointed by the Senate of Nevada, a committee to report upon the railroad interests of the State of Nevada, and especially upon the Pacific Railroad, in the progress of which the citizens of your State are deeply interested. It would afford the Directors of this Company great pleasure to confer with you personally upon the important matters thus referred to your committee; but the pressing duties, growing out of the largely increased force of laborers now employed in grading the railroad of the Company, prevent. We, therefore, address this communication to you, and through you to the Legislature and people of Nevada.

### SURVEY AND LOCATION OF THE ROUTE.

This Company commenced the survey and examination of routes for a railroad over the Sierra Nevadas, in the Summer of 1861, under the superintendence of the late T. D. Judah, Esq., as Chief Engineer, one of the most eminent and experienced railroad engineers of the time, who made the first complete instrumental and "thorough Railroad survey" ever made over those mountains. This was done at a great expense, and at a time when the feasibility of constructing a railroad over them was deemed exceedingly doubtful. The result of that survey fully established the practicability of the route surveyed, though, as was anticipated, requiring a large outlay of money to construct the road. Careful examinations and reconnoissances were made by Mr. Judah and other officers of the Company, of other routes, but they all resulted in demonstrating the superiority of the line surveyed, and which was finally adopted by the Company, upon the recommendation of Mr. Judah. For a full description of the line thus adopted, its advantages over others, and the various

surveys and reconnoissances made by this Company, we refer you to the reports made by Mr. Judah, October 1, 1861, October 22, 1862 (bound in one pamphlet), and July, 1863; also the report of our present Acting Chief Engineer, S. S. Montague, Esq., made October 6, 1864, copies of which accompany this communication.

In the first report Mr. Judah states, that these surveys and examinations resulted in "*developing a line with lighter grades, less distance, and encountering fewer obstacles than found upon any other route or line hitherto examined across the Sierra Nevada mountains, and proving by actual survey that the difficulties and formidable features of this range can be successfully overcome for railroad purposes.*" On pages 10 and 11 he sums up the prominent features and advantages of the line.

In connection with this subject of the location of the line of the Pacific Railroad, we will state that no final selection was made by the Company, until after the passage of the Pacific Railroad Act by Congress, which was approved July 1, 1862, and after Mr. Judah's return from Washington. By the 9th Section of that Act, this Company was required to file its acceptance of its provisions within six months after its passage, and by the 10th Section to complete 50 miles of its railroad within two years thereafter. When it is remembered that all the iron, rolling stock and other railroad material had to be ordered and manufactured in a distant market, requiring months of time, and then transported thousands of miles, running the gauntlet of the rebel pirates, taking an average of eight months additional in the passage, and that the first 50 miles carried the road far into the mountains, and included some of the heaviest and most expensive grading on the whole line, it will be seen that the Company were compelled to commence work as soon as possible, having no time to spare in making new surveys. But in order to give this question of routes as full consideration, and obtain all the light possible, a notice was published in the *Sacramento Union* for about eight weeks, of which the following is a copy:

"PACIFIC RAILROAD NOTICE.

"The Central Pacific Railroad Company of California, desirous of obtaining full information with regard to routes across and passes through the Sierra Nevada mountains, will receive information and give due consideration to the merits of routes other than that surveyed by them; *provided*, that proper surveys or reconnoissances are made of such routes, in the usual manner by competent engineers, and furnished to them before the first day of October, 1862.

LELAND STANFORD,

President.

MARK HOPKINS,  
Secretary."

Dated Sacramento, Aug. 22, 1862.

Letters were also written to parties interested in several routes, and especially that by way of Placerville. Persons interested in that line promised to furnish the Company with full information respecting it, but never did so. From our own knowledge of the roads and the mountains between Placerville and Carson City, we were confident that a railroad could not be constructed on that line, within the time required by the Act of Congress, or at any reasonable outlay of money, and we presumed that the citizens of Placerville had become satisfied of these facts, from the examinations made by them, and therefore deemed it unnecessary to report the result to this Company. We were further confirmed in this, by the appearance afterwards of a report of an alleged survey over Johnson's Pass, which showed that it would be necessary to construct a tunnel through the granite rock at the Summit  $3\frac{3}{4}$  miles in length, a work which would require at least fifteen years of time and an expenditure of \$10,000,000 to complete.

Further information upon this question of routes, has only served to convince us of the wisdom and correctness of the selection made. Our only object has been to select the cheapest, most direct, and most practicable line for this great national highway, and if that by way of Placerville had possessed even equal advantages with the one by way of Dutch Flat and Donner Lake, it would have received the preference, because it was at that time the route principally traveled, and its selection would have secured the support, instead of hostility, of the enterprising citizens of El Dorado county, already fully alive to the importance of railroads, and with whom we had had intimate business relations. But cost and facility of construction were necessarily overruling considerations in determining so important a matter.

We regret that the selection made, injuriously affected the interests of some other railroads, wagon roads and stage lines, already established and in successful operation. The opening of a new and better route necessarily affected them. The result has been a bitter and vindictive opposition from these interested parties, and which we fear is now being brought to bear upon the Legislature and people of Nevada, to delay the progress of a work which has already interfered with their profits, in the reduction of fares and freights over the mountains. Still what they have thus failed to realize has been a great gain to Nevada. But this result could not have been avoided by us even if we had desired to. It is necessarily incident to the construction of the Pacific Railroad.

## PACIFIC RAILROAD ACT.

In the fall of 1861, Mr. Judah prepared accurate maps and profiles of his surveys, and the Company sent him with other agents to Washington, to lay the same before Congress, to induce that body to extend national aid to the work, for without such aid it was well known the road could not be constructed, on account of its great cost and the uncertainty of its being a profitable investment. Without aid of this kind, capitalists could not be induced to invest their money in it. Congress finally passed the Pacific Railroad Act, granting important assistance to this as well as other companies, and securing the construction of a magnificent national railroad from the Missouri river to the Pacific ocean, which will traverse the heart of your State from its eastern to its western boundaries, and which is destined to speedily develop its wonderful mineral resources. This result was secured by the untiring efforts of the Chief Engineer and Agent of this Company, as will appear by the following letter addressed to him by prominent Congressmen:

WASHINGTON, June 24, 1862.

T. D. JUDAH, Esq., of California:—

DEAR SIR: Learning of your anticipated speedy departure for California on Pacific Railroad business, we cannot let this opportunity pass without tendering to you our warmest thanks for your valuable assistance in aiding the passage of the Pacific Railroad bill through Congress. Your explorations and surveys in the Sierra Nevada mountains have settled the question of the practicability of the line, and enabled many members to vote confidently on the great measure, while your indefatigable exertions and intelligent explanations of the practical features of the enterprise have gone very far to aid in its inauguration.

Very truly, yours,

JAMES H. CAMPBELL,

Chairman Select Committee of Pacific R. R

A. A. SARGENT,

Of Sub-Committee of House.

## REPRESENTATIVES.

R. Franchot,  
Schuyler Colfax,  
William D. Kelly,  
T. G. Phelps,  
Frank P. Blair,  
S. Edgerton,  
J. H. Goodwin,  
A. W. Clark,  
Burt. Van Horn,

W. A. Wheeler,  
B. B. Van Valkenburgh,  
Alfred Ely,  
John F. Potter,  
William Windor,  
F. F. Low,  
Elihu B. Washburn,  
Samuel F. Woreester,  
William T. Cutler,



Augustus Frank,  
H. G. Blake,  
John A. Bingham,  
W. H. Wallace,  
R. E. Fenton,  
I. N. Arnold,  
E. Aug. Smith,  
John B. Steele,  
Thaddeus Stevens,  
Edward Haight,  
Edwin H. Webster,  
J. S. Watts,

John B. Alley,  
William Watt,  
W. F. Kellogg,  
Erastus Corning,  
C. Vibbard,  
Thomas S. Price,  
Cyrus Aldrich,  
George W. Julian,  
F. C. Beaman,  
Thomas M. Pomeroy,  
Alexander H. Rice,  
C. B. Sedgwick.

#### SENATORS.

A. C. Pomeroy,  
J. H. Lane,  
A. Kennedy,  
Daniel Clark,  
H. B. Anthony,  
B. F. Wade,  
James A. McDougall,  
Milton S. Latham,  
J. W. Nesmith,

Edgar Cowan,  
O. H. Browning,  
J. B. Henderson,  
R. Wilson,  
L. M. Morrill,  
A. Wright,  
Lyman Trumbull,  
John C. Ten Eyck.

John W. Forney, Secretary United States Senate."

#### NATIONAL AID.

By the Pacific Railroad Act of 1862, as amended in 1864, this Company is entitled to United States Government six per cent. thirty-year bonds to the amount of \$16,000 per mile for that portion of its line between Sacramento and Arcade Creek, seven miles, that being the point fixed by the President of the United States, under the Act, as the western base of the Sierra Nevada, and \$48,000 per mile for the 150 miles lying east of that point. They also are to receive twenty sections, equal to 12,800 acres, per mile of railroad, of public land; that is to say, every section designated by odd numbers within twenty miles on each side of the railroad line, excepting the mineral lands, on which, however, the timber is granted to the Company. These Government bonds are, however, a lien upon the railroad and its fixtures, but the Company are authorized to issue mortgage bonds to an equal amount, which are to have priority over them.

## STATE AID.

The Legislature of the State of California, at its session in 1864, authorized the Company to issue \$1,500,000 of its bonds, the interest of which, at seven per cent. per annum for twenty years, was provided to be paid by the State in gold coin, from a railroad fund raised by a special tax, in consideration of certain services to be rendered by the Company. These bonds were recently issued by the Company, and the constitutionality and binding force of the law has been fully established by a recent decision of the Supreme Court of this State. We send you herewith a pamphlet containing a copy of this law, with the opinions of eminent counsel, showing its validity and irrepealability, and the decision of the Supreme Court thereon. These bonds are now available to the Company, and will enable us to employ all the laborers that can be worked to advantage in the grading of the road during this season.

## COUNTY SUBSCRIPTIONS.

The Legislature of 1863 also passed laws authorizing the counties of Sacramento, Placer, and the city and county of San Francisco to issue their bonds in payment of the stock of the Company, the first to the amount of \$300,000, the second \$250,000 and the last \$600,000, depending, however, upon a favorable vote of the citizens of those counties. This was secured in each county by large majorities, and the subscriptions were promptly made and the bonds issued by the first two counties. These subscriptions have not only greatly aided the Company, but have assisted it by showing the public confidence in the work and its conductors. The enemies of the Pacific Railroad, by their efforts and law-suits, succeeded in delaying the subscription by San Francisco, and the Legislature of 1864 authorized the Supervisors to compromise with the Company, which they did, by directing the issue of \$400,000 of the bonds, without taking any stock. The same interested parties have thus far succeeded in inducing a majority of the Supervisors to refuse to carry into effect their own ordinance. The same persons instituted suits against the Company in each of these county subscriptions to prevent the issue of their bonds; but they signally failed in all of them. Nine thousand eight hundred and eighty-nine shares of stock, equal to \$988,900, have been subscribed by individuals and disposed of for railroad material, etc., and the Company has the largest list of stockholders of any other railroad corporation in this State, among whom are some of the largest capitalists in California and the Atlantic States. Such is a brief statement of some of the means thus far secured by the Directors to carry on the work.

## PROSECUTION OF THE WORK.

Soon after Mr. Judah's return to California from Washington the Company placed several corps of Engineers in the field to make the final working surveys of the first division of fifty miles, which terminates near Illinoistown. The work of grading was commenced in February, 1863. The first shipment of iron rails reached Sacramento October 8, 1863, and the track laying immediately commenced, and was steadily prosecuted, with a few delays caused by the failure to receive supplies of iron and ties within the time contracted for, until June 6, 1864, when the first thirty-one miles were completed to Newcastle, attaining an elevation of about 1,000 feet above Sacramento. A large portion of this thirty-one miles is in the lower foothills, requiring expensive grading through rocky points. We are confident that the amount of work done and material purchased by this Company since it commenced operations, will favorably compare with that of any other Company on this coast or even the Atlantic States, in the same length of time.

The Union Pacific Railroad Company, created by the Pacific Railroad Act, and composed of some of the wealthiest capitalists in the Eastern States, has a line the eastern end of which is easy of construction compared with the California line. Commencing at Omaha on the Missouri river, they have comparatively little grading to do until they reach the Rocky Mountains. Their iron and rolling stock can be purchased close at hand, and yet, with these and other advantages, they have not as yet laid a single rail, and the latest accounts state that they do not expect to finish grading the first eighteen miles before May next. Recent accounts state that thirty-eight miles, from Wyandotte to Lawrence, over an almost level plain, upon a side branch of the main Pacific Railroad, made by another Company, has only just been completed. We are confident that the cost of grading the first 50 miles of the California road will equal the expense of grading 300 miles of the line between the Missouri river and the Rocky Mountains. These facts alone show that this Company has not been lacking in diligence and energy, in raising the means, procuring the material and constructing the work so far. Indeed, we believe that this Company has done more work in grading and preparing road bed than all the other railroads in California put together, not even excluding that which pretends to be a rival road.

Not only has 31 miles of first-class railroad and telegraph been completed, with several substantial bridges, numerous culverts, all of brick or stone, but \$159,826 has been expended on the grading and masonry between Newcastle and Clipper Gap. So, also, a large amount of iron, rolling stock, ties and other railroad material has been purchased and paid for, most of which

has arrived and is now in use, or ready for use. We send you herewith a verified statement of the Secretary and Treasurer, showing the amount already expended by the Company on its work, the amount of iron, cars, locomotives, ties and railroad material purchased and on hand, showing also the condition of the affairs of the Company, and the means it has for the prosecution of the work.

### CAUSES OF DELAY.

It is true that the work of construction has not progressed as rapidly as the Company have desired, and as the public impatience has demanded. But when the difficulties to be encountered are fully considered, we feel confident that the public will not blame the Company because their expectations have not been fully realized. One thing is certain, that no one can be more anxious than the Directors to see the road completed as soon as possible, and none will consent to greater sacrifices than they to accomplish it. We have a large pecuniary interest in that result. But it must be borne in mind that the Company is constructing the greatest work of the age, in the midst of the greatest rebellion known in history, which shakes the country from its center to its circumference, and which is deranging the finances of the country to an extent heretofore unknown. The building of railroads is mainly a question of money. While the war has swelled the paper currency of the country, and thus made that kind of money plenty in the Eastern States, gold has been almost driven from use there, and rapidly withdrawn from circulation here to be sold there. It rates at so high a premium, that it can be obtained in the Eastern markets, where alone capital can be found for railroad purposes to any extent, only at a ruinous sacrifice. If the National currency was in use here, this difficulty would be in a great measure removed. But the Pacific States, whether wisely or unwisely it is not necessary for us to say, has practically excluded that currency from circulation. This Company is, therefore, compelled to use gold in payment for labor, and in all its business transactions at home. This can only be procured in large amounts at a great and ruinous sacrifice of its securities. Looking to the future, as well as to the present interests of the great work confided to our care, we have not deemed it prudent to submit to sacrifices, which while affording but little present aid, would cripple, if not stop the prosecution of the work in the future. We have hoped that this high premium on gold which has ruled during the past year was but temporary, and that it could soon be obtained at rates which would enable us to dispose of our securities without too great a sacrifice. In pursuing



this course we feel confident of the approbation of every true friend of the Pacific Railroad, even though it results in a temporary delay of the work we all so ardently desire to see completed.

It was under these circumstances that the use of the bonds of San Francisco, became of such vital importance to the Company during the past Summer. These bonds can be more readily sold for gold in the San Francisco market than any other, except, perhaps, State bonds. Had we received them promptly when we were legally entitled to them, they would have afforded the means of prosecuting the work, and avoiding some of the delay which has occurred. The majority of the Supervisors of that great city, which will receive more benefit from the railroad than any other portion of the country, in defiance of a popular vote of more than two to one in favor of the Company, and in violation of their own plighted faith and honor given by a vote of nine to two, in favor of the compromise proposed by themselves and accepted by this Company, have still persisted in refusing to do what the law enjoins, and the Supreme Court has repeatedly awarded. Their course will be a lasting reproach to that great metropolis, which has been entirely willing to enjoy the benefits of the work, without sharing any of its risk or expense. But this difficulty we believe will soon be overcome, and \$400,000 of bonds; of the most available kind, will soon be placed at the disposal of the Company to be used in pushing on the railroad toward your State. The same interested parties have been untiring in their efforts, sparing no expense of time or money, to deprive us of these means. So far as this has contributed to delay the work, *they* must bear the responsibility. The application for a mandamus to compel the Supervisors to deliver these bonds has been argued and submitted to the Supreme Court, and we may reasonably hope for a speedy decision.

#### AVAILABLE MEANS.

We have referred to only a few of the many difficulties the Company has had to encounter. It would make this communication too voluminous to mention them all. But it affords us pleasure to state, that we are able to give assurance of such a prosecution of the work in the future, as will leave no room for complaint. It must be borne in mind that up to this time *the Company has used only its own means*, in carrying on the work, having thus far received no direct benefit from the promised national or State aid. Although our enemies have industriously circulated reports of the total cessation of all work on the line, yet they have been utterly without foundation, as there has been at no time less than 150 men, with a due proportion of horses

and carts, at work on the road. Now, however, that aid has become useful. The recent decision of the Supreme Court on the State Aid Bill has rendered \$1,500,000 of bonds, of a market value nearly equal to State bonds, available for the work of construction.

It cannot be many weeks before a final decision will be rendered by the Supreme Court, in the suit for the San Francisco bonds, for \$400,000. The principal questions involved in that suit have already been decided in favor of the Company by the same Court. These bonds will undoubtedly be received long before the \$1,500,000 of State aid bonds are exhausted.

There is also now due from the U. S. \$1,264,000 of Government bonds, under the Pacific Railroad Acts, upon the 31 miles of completed road. These bonds will be issued as soon as they can be printed and executed by the proper officers. Some delay has occurred on account of the great press of business in that department. But there is no doubt that they will be received within a few months, if not weeks. As soon as these bonds are received the Company are authorized to issue an equal amount of first mortgage bonds, which will have priority to those of the Government, and will therefore have a high market value. This will add \$1,264,000 to our available assets.

The Company is entitled to a patent for a large amount of public land for the 31 miles constructed. The exact number of acres, or the value of these lands, it is not possible to state at this time, but many estimate it at \$500,000. In a few months they will become a source of revenue to the Company. The receipts of the railroad now in operation, and which will greatly increase as it is extended up the mountains, will also form no inconsiderable item of assets. The Company also has \$18,461,100 of unsold capital stock, which can soon be made available for the construction of the work. As the road is extended, it will soon entirely control the immense trade to Nevada, and thus the value of the stock, as a dividend paying investment will soon be established, and it will undoubtedly be sought after by capitalists. No further expense will be incurred in the purchase of iron, chairs, spikes, or ties, during this season, as a sufficient amount is now on hand to lay all the track that can be graded within that time. Thus all the means of the Company can be applied solely to the grading, and preparing the road for the track-layers.

## FUTURE PROSPECTS.

From this plain statement, it will be seen that this Company is now in a position to prosecute the work vigorously from this time onward until it is fully completed, for as the road is extended every 20 miles the national aid becomes available, both in bonds and land. The policy of the Directors has been, and probably will continue to be, not to proceed rashly, or to incur obligations that cannot be promptly met. A contrary course would soon lead to financial embarrassment, and endanger the completion of the work. Feeling confident in the future, handbills have been issued calling for a large force of laborers, a copy of which is sent with this. With this increased number of workmen, the work will be pushed forward vigorously during the season.

We feel confident that the road will be completed twelve miles further, to Clipper Gap, by May next, and to Illinoistown, fifty-four miles from Sacramento, by September next. We expect to reach Dutch Flat, which is sixty-eight miles, in time for the Spring business of 1866, and the Yuba bottoms, near Crystal Lake, by the Fall of 1866. We have no doubt of being able to complete the road to the State line within the time fixed by the Act of Congress. How much sooner than that, depends upon the price of gold and the condition of financial affairs in the Atlantic States, matters which cannot be foretold. Of one thing the people of Nevada may rest assured: that this Company will do all that can be done, by the judicious use of the means at their disposal, to complete the railroad to and through Nevada at the earliest possible moment. For this the *interest* of the Company is a sure guarantee.

We ask no financial aid from Nevada at this time; but our good faith and zeal in carrying forward the great work so important to her people, entitles us at least to words of encouragement from her Legislature. We trust her representatives will see that this Company, in the selection of the most direct and available route over the mountains, and in the industry with which national, State, county, and individual aid and capital has been concentrated upon the work, and the progress and preparation of material already made affords the only reliable hope for the speedy construction of any railroad over the mountains. It is idle to talk of constructing two railroads over the mountains at the present time. It cannot be done; and all agitation of the matter tends to hinder the work on the only road that has or can secure national aid. It is certain that Congress will never assist in building a road to rival or compete with one in which so large an amount of national funds will be invested. Any act, therefore, which tends to create doubt or distrust in the public mind, will only delay the completion of the road so much desired by the people of Nevada and California.

## WORK DONE.

We add the following statement of the amount of work done and railroad material purchased by the Company up to Jan. 1, 1865 :

Earth and cement excavation, cubic yards.....	602,598
Excavation requiring blasting, cubic yards.....	195,576
Stone masonry, cubic yards.....	3,230
Cobble and granite around bridge piers, cubic yards...	825
Number of brick in the work.....	280,582
Timber in structures, feet B. M.....	1,233,800
Lumber in structures, feet B. M.....	130,000
Number of redwood ties.....	116,000
Tons of iron.....	8,000
Locomotives.....	8
Cars.....	146

## ESTIMATES OF COST.

The estimated cost of grading, masonry, bridging, trestling, depot buildings and water stations from Newcastle to Clipper Gap, a distance of 12 miles, is \$574,852. The estimated cost of the same work from Clipper Gap to the end of the first division of 50 miles, near Illinoistown, is \$584,451. The estimated cost of the same work from the end of the 50 miles to Dutch Flat, a distance of 18 miles, is \$2,169,277. The estimated cost of the Railroad from Dutch Flat to the State line is \$6,065,000, and from the State line to the Big Bend of the Truckee, \$2,500,000, as is shown by the report of Mr. Judah.

This Company has surveyed the line to a point five miles east of the Big Bend of the Truckee river, from which point to Salt Lake, it will probably be located on the cheapest and most direct route, passing through, or as near as practicable, the intermediate mining districts, the trade of which will constitute an important part of the business of the road. Where it is impracticable to carry the main line through the important mining towns, branch roads will be constructed.

The Pacific Railroad is a subject of peculiar solicitude on the part of the American people, especially those residing in Nevada, and we have endeavored in this communication to give them a full statement of the present condition and future prospects of that portion of the work committed to the care of this Company, and in which Nevada is more directly interested. We feel assured that your citizens will extend to this great National enterprise their cordial support, and that neither they or their representatives will extend the least aid to those, who, from interested motives are exerting their utmost to delay it.

L. STANFORD, President C. P. R. R. Co.

E. H. MILLER, JR., Secretary C. P. R. R. Co.



OFFICE OF CENTRAL PACIFIC RAILROAD  
COMPANY OF CALIFORNIA. }

SACRAMENTO, January 13, 1865.

*To Leland Stanford, President Central Pacific Railroad Company :*

SIR—In compliance with your request, we submit the following verified statement of the affairs of the Company at this date :

The authorized capital stock of the Company is twenty million dollars.

The total amount of the capital stock issued and subscribed is one million five hundred and thirty-eight thousand nine hundred dollars.

The total amount expended by the Company is two million seven hundred and nine thousand and twenty-five and seventy-hundredths dollars.

The total liabilities of the Company are—

For first mortgage bonds issued, payable July 1, 1883 .....	\$1,394,000 00
For bonds of July 1, 1864, payable July 1, 1884...	27,000 00
For bills payable (not matured).....	115,538 35
For unpaid bills of 1864.....	1,263 86
For balance due the treasurer for advances.....	6,493 86
Total.....	\$1,544,295 70

The assets and available means of the Company are—

Capital stock unsold.....	\$18,461,100 00
Amount due from stockholders.....	135,670 00
Bonds of Placer county unsold.....	75,000 00
Bonds of Sacramento county unsold.....	163,500 00
Amount due from the city and county of San Francisco, in 7 per cent. gold bonds..	400,000 00
Amount due from the United States in 30-year 6 per cent. bonds.....	1,264,000 00
Bonds for \$1,500,000, bearing interest at 7 per ct. per annum, payable in gold by the State of California (under a law the constitutional validity of which has been sustained by the Supreme Court), and the first installment of the interest was paid to the Company at the State Treasury on the 1st of January. Twenty-seven thousand dollars of these bonds have been negotiated, leaving available.....	1,473,000 00
Every alternate section of public land (except mineral land) for twenty miles on each side of the line of the road.....	

Thirty-one miles of first class Railroad and telegraph line completed, with depot buildings, engine houses, etc.....	
8 locomotives.....	
10 passenger cars.....	
4 baggage cars.....	
124 freight cars.....	
5 hand cars.....	
3 construction cars.....	
Extra axles and wheels for cars.....	
Extra drivers, tires and axles for engines.....	
1 60-horse power stationary engine and machinery for machine shop.....	
5,000 tons iron.....	
Chairs and spikes enough to lay all the iron.....	
42,305 redwood ties, enough to lay 22 miles of track.....	
Grading and masonry, beyond Newcastle, done by the Company at a cost of.....	\$159,826 32
Sutter Lake property, about thirty acres within the limits of Sacramento City, and the exclusive right to the use of the levee front in Sacramento, from K street north, about 1100 feet in length by 150 feet in width.....	
Two lots in Sacramento City.....	
Land at Roseville, about twenty acres.....	

E. H. MILLER, JR.,  
Secretary C. P. R. R. Co.

MARK HOPKINS,  
Treasurer C. P. R. R. Co.

Subscribed and sworn to before me, this 14th day of January, 1865.

E. B. CROCKER,  
Court Commissioner for Sacramento Co., Cal.



7

COMPLIMENTS  
OF  
COL. WARREN  
CALIFORNIA FARMER

# PACIFIC RAILROAD

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SPEECH OF THE  
HON. C. W. TOZER,  
SPEAKER OF THE NEVADA ASSEMBLY,  
FEBRUARY 6, 1865.

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THE history of the somewhat lengthy discussion of the subject now before this House will bear me out in the assertion that I have hitherto refrained from intruding upon your time or attention any opinions of my own: And I should not now, at this late stage of the proceedings, when the resolutions are before us for their third reading and our final action, arise from my place and crave your brief indulgence, did I not feel that the question is one fraught with the gravest consequences, for weal or for woe, as we may this day determine, to the people of the State of Nevada. I feel, sir, that I should be recreant to myself, in the character of a representative here, to longer keep silence and permit, without entering my protest, the adoption of a measure so disastrous to our chief interests, so iniquitous in its conception, so pernicious in its results. Other advocates of the Central Pacific Railroad Company, more able and more eloquent than I, have addressed themselves to this question. Their arguments are before you, and, if not unanswerable, are unanswered. I shall not trespass upon your time by a repetition of the reasons, so well given by Mr. Haskell, Mr. Bishop, and others, for the faith



that is in us, but propose only to touch upon those few points in our case not already exhausted by those gentlemen who have preceded me. The resolution proposes to ask, through our representatives in the Congress of the United States, for a donation of \$10,000,000 to that railroad company that shall first build a road to the eastern base of the Sierra Nevada Mountains. I do not hesitate to reiterate here and publicly the firm, deliberate conviction of my judgment, often heretofore expressed in private conversation, that the adoption of this resolution is not calculated to expedite the building of any railroad to our borders; but, on the other hand, is well calculated, and intended too, to retard the building of all. I trust I shall not be understood as implicating in such design either the introducer or the advocates of this measure. I shall charitably accord to those gentlemen motives of the loftiest patriotism and most sincere devotion to the interests of their State, while I deeply deplore the error into which they have fallen, or have been led. 'Tis not inappropriate to say, "Forgive them, Lord, they know not what they do."

#### ACTION OF CONGRESS.

The Congress of the United States, after long deliberation and the most careful estimates from Government surveys, has selected the Central Pacific Railroad Company as the recipients of the very liberal national bounty so wisely determined to be given in aid of the greatest railroad enterprise in the world. It ill becomes us to call in question, at this late day, the motives that have controlled the Government in the exercise of her liberality toward us, or the wisdom of the measures she has adopted for our especial welfare. It may be admitted now, and I do admit, that had Congress made the Federal aid receivable by the company first completing their road to any given point, thus creating competition, the more speedily would the given point have been reached. But the Federal aid is given absolutely, without any such

conditions of competition, to the Central Pacific Railroad Company, regulated only by the law of Congress; and so long as that company shall comply with the terms upon which the aid was so given them, no power on earth can deprive them of it. Under such circumstances, what reason can be given that the Federal Government will, at our suggestion, change the settled policy of years, and (having already given so largely) offer another \$10,000,000 for Latrobe competition.

The movers of this resolution—and I assume the original mover is not a member of this House—knew full well that, there is not the remotest probability that its adoption by this Legislature would result in any additional appropriation by Congress; and we must look elsewhere for the motives which prompt it and for the interest affected thereby. It can be readily seen that the passage of such resolution by this Legislature, the representatives of a people more deeply interested in the speedy completion of the railroad than any other, would operate most directly and most powerfully to depreciate the bonds of the Central Pacific Railroad Company—to render less marketable these bonds, the lands, timber, and all available assets of the company, upon the proceeds of the sale of which the company must depend for the money wherewith to purchase material and pay for their labor. A delay of even one year will result so vastly to the profit of the parties now having and holding a monopoly of the immense trade and travel with California, that we need look no farther for the motives which have so long impelled them to acts of open, unmistakable hostility towards the other and rival route.

#### BISHOP'S REPORT.

Having alluded to the cause of this railroad warfare, I wish now to call your attention particularly to one of the weapons with which the battle, here at least, has been waged. Some days after the introduction of these resolutions, copies of a report, prepared by F. A. Bishop,

and directed to the President and Directors of the San Francisco and Washoe Railroad Company, were laid upon our desks. More recently I have observed that these copies have mysteriously disappeared—have been principally withdrawn from circulation. I cannot commend the taking from me the copy to which I had acquired a title, but yet it was a wise discretion that dictated their removal. Had Major Bee been at home, this document, so open to criticism, would never have found its way here. It will be remembered that this last named company was only organized by the “large and wholly responsible body of respectable capitalists”—ten Placerville millionaires, whose aggregate wealth would not buy a steam whistle—on the 6th day of January, 1865. And yet in a few days appears this elaborate report, prepared evidently for this market, and intended to act its part in this discussion.

It is plain that this survey was not made by the company to whom the report was directed, for it was completed months before that company was created. The report does not inform us who caused this survey to be made, but it affords internal evidence that it was done by the owners of the several toll roads and stage lines on the Placerville route, who have so bitterly opposed the Central Pacific (and I might with justice say any Pacific) Railroad, and that it was drawn by a skillful and designing writer to be used against it. To accomplish this purpose it was necessary to make it appear that a road could be built at less cost by the way of Placerville. The author of that report, who has clearly a mathematical turn of mind, having the figures of the Central Pacific Company before him, was not at great loss to make the figures of the would-be rival company, by whom he was employed, somewhat lower than the other. As a result of this style of railroad engineering we have the statement that ninety-two miles of railroad over a lofty mountain range, with 34,144 feet (equal to about six and one-half miles) of trestle work, some of which is one hundred and

seventy-eight feet high, with twenty-three tunnels of an aggregate of 9,752 feet (nearly two miles), can be built for \$5,824,318 92. You will observe this most exact and accomplished engineer mentions the amount to a cent that the road will cost. This estimate is only \$63,287 per mile. A comparison of these figures with the actual cost of nearly all the railroads built in the Eastern States, where all the material and the labor is procurable at less than one-half the price they command here, will show that but very few railroads have ever been built at a cost so low as the estimates of "Our Bishop." This statement alone should be quite sufficient to condemn the report and its author to a well earned oblivion, and to convince this Assembly that the publication was only intended to deceive and mislead.

#### HIS ESTIMATES.

Again, please observe with what complacency our author says :

"A comparison of these estimates with those made by the officers of the United States, and the Central Pacific Railroad Company, upon the cost of a railroad across the mountains, must satisfy the most incredulous of the superiority of this route."

Wonderful achievement of engineering skill, but still more wonderful exhibition of audacity and egotism on the part of the engineer. If this paragraph, quoted literally from the report, proves anything, it proves this proposition, viz: You have only to make known to this paragon of an engineer what you want, and with his versatile genius and elastic conscience he will figure it out to suit you. Let me call your attention, sir, to another significant expose into which this report has led the company, for whose purposes it is fabricated. This resolution asks for a donation of \$10,000,000 in United States bonds. No less amount, it seems, will suit them, and yet they prove (by this publication) that the whole line from Placerville to the divide between Carson Valley and Washoe Valley can be built, stocked and put in perfect running order for the sum of \$3,726,568 92, or \$1,273,-



431 18 less than they modestly ask Congress to give them. Does not the amount asked for, when considered in connection with their estimates, show conclusively that they ask with no expectation of receiving, and again lead us to the irresistible conclusion that their sole object is to hinder and delay the work on that route and of that company which has now guaranteed to it, by the most solemn legal enactments of the highest law-making power in the land, the governmental aid, confessedly liberal, and ample for the early completion of the road, unless, forsooth, such unfriendly legislation as is now proposed shall to some extent render it nugatory?

#### BALLOON CONNECTION.

Another curious fact is shown by this report of this pretended survey. I quote from the report: "The initial points of the survey of the located line are on the summit of the Divide between 'Placer creek' and the South fork of the American river."

Placerville is about 1,850 feet above tide water, and this initial point, we are told, is 2,490 feet above tide water, or just 640 feet vertically above Placerville, the terminus of the survey of the Latrobe road.

Whether this slight elevation is to be overcome by an inclined plane or by the use of a balloon, we are uninformed, but should presume the latter, after a careful study of the map now on exhibition by my friend from Storey, Mr. Patten.

There is one admission in the report, however, which is only accounted for by the great haste in which it was prepared, and will doubtless be corrected in the second edition. It is admitted that Johnson's Pass is several hundred feet higher than the Pacific Railroad Pass. It will be observed by reference to the document itself, that where the trestle-work is spoken of the "average" height is only given. Why not state, as is usual, the height of the highest bent? How do we know that some of these loose, "average" statements do not cover an im-

practicable elevation? The height of one is stated at 178 feet; and as all others are omitted in the report, it is a fair presumption they are still higher. Certainly, the highest would not be selected from all as an example.

#### SNOW PLATEAUS.

By far the most interesting and valuable part of this "Chief Engineer's" report, is the dissertation on the subject of "snow." We are gravely told that the snow on the "Donner Pass" is deeper because it has an "elevated plateau" to catch it. So we are told that while the snow in Lake Valley, a still more "elevated plateau," only falls to the depth of five or six feet, in the Donner Lake Valley, which has less elevation, it falls to the depth of twenty-five or thirty feet. Let us hope that this report will not gain circulation in Donner Lake Valley, else the inhabitants there, who have heretofore suffered no inconvenience from the snow, may accept the vagaries of Bishop for facts controverting their own long experience, and abandon their pleasant homes in the valley where thus far they have only found say four feet of snow in one of the severest Winters ever known. This statement in the report completely explodes the "elevated plateau" theory, for, bereft of all circumlocution, the plain statement is made—the higher valley of Lake Tahoe has less snow than the lower valley of Donner Lake. The enemies of the Pacific Railroad, and their engineer, Bishop, have long made this snow question one of their strong points. This was the case when they supposed that Johnson's Pass was the lower, and they adhere to their pet affection when, by their own showing, the Donner Lake Pass is found to be the lowest. Every day experience teaches us that in two places differing so little in their latitude, that which has the greater elevation will have the deeper fall of snow.

But, sir, all this talk about the snow being an obstruction to railroad communication across the Sierras amounts to nothing. We all know that railroads are successfully

operated in the mountains of New England and of Canada, where the Winters are longer, colder, and the fall of snow much greater than any railroad across the Sierras will have to contend with. I have no fear that any railroad that may ever be built over these mountains cannot be successfully worked on account of the snow.

At the commencement of Winter, the San Francisco *Alta*, a paper which I characterize as the organ of the enemies of the Pacific Railroad, made a prediction that the first snow storm would close up the Dutch Flat route, but, equally to their astonishment and chagrin, they find that after the heaviest snow storm of the season passengers by that route arrive in San Francisco twenty-four hours sooner than by the Placerville.

#### “RIGID” SURVEYS.

We are often informed, or rather misinformed, through the same interested source, that “no other line over the mountains has ever been subjected to such rigid instrumental examination.” If Bishop’s report is made upon that rigid instrumental examination, the friends of the Pacific Railroad may well congratulate themselves and the country that they have been mercifully spared such infliction. But, sir, Judah, the late Chief Engineer of the Pacific Railroad, a competent, earnest, honest man, has told us of the careful and accurate manner in which he conducted his surveys, and his statements and estimates bear upon their face and all through them evidence of their accuracy and truthfulness. The character of Judah is too well known to be affected by such newspaper assaults or by the petty slanderers who assert that no lines were run or stakes driven by him. I have said enough of this newspaper warfare and of this wonderful report. I only wonder that the hand which signed the name of F. A. Bishop thereto is not palsied forever. If he ever had any reputation as a surveyor this report sweeps it away, and he, poor man, must turn his attention to other pursuits more congenial to his peculiar or-

der of talent. He should deal entirely in fiction, not fact--in figures of speech, and not arithmetic.

#### REASONS AGAINST EPSTEIN'S RESOLUTIONS.

The gentleman from Douglas (Mr. Epstein), who claims the unenviable paternity of these resolutions, asks, with an apparent sincerity well calculated to deceive, Why not vote for this resolution and ask Congress to give \$10,000,000 to that company first completing a road across the mountains? If that gentleman and others are not now informed by the course of my argument why I cannot vote for the resolution, and why they should not, permit me to state more briefly my reasons for voting against it:

1st. Because Congress will not, cannot, comply with the request if we make it, and the resolution asks the Congress of the United States to repudiate the action already had by them on this subject.

2d. Because I firmly believe there is but one company aiming or intending to cross the mountains with a railroad; and the passage of these resolutions would create the false impression abroad that there are two or more.

3d. Because parties well known for years as the enemies of the Pacific Railroad are urging their passage. They have their accomplished agents at work here. "How doth the busy, busy bee improve each shining hour!"

4th. Because it is evident that these resolutions, should they pass, can be used to delay the Pacific Railroad and to injure the company building it.

5th. Because I will not have my name enrolled among those who will one day be reckoned as the enemies of this great national work.

6th. Because I can plainly see in this measure another, and probably not the last, of a series of blows aimed by the same hand and nerved by the same interest, which has sought to retard the Central Pacific Company since the commencement of their work.



## WHO OPPOSE THE PACIFIC RAILROAD.

Mr. Speaker: Since the organization of the Central Pacific Railroad Company, and the selection of their route, the owners of stage lines, toll roads and other projected but impossible railroad lines across the mountains, have notoriously resisted in every possible way the building of their road. They have sent their agents to Washington, to the legislative halls of California, to our Constitutional Convention, before the people of the several counties in California proposing to aid in the work, before the Courts of all those counties, after the people had voted to subscribe to the capital stock of the Central Pacific Company, and being beaten there, before the Supreme Court of the State of California. And, gentlemen, we meet them here urging the passage before this Legislature of identically the same proposition argued so long, but happily so unsuccessfully, before the Legislature and the Courts of our sister State. I earnestly hope the same fate awaits them here.

These men, with a pertinacity worthy of a better cause, have sought everywhere for an official or even semi-official recognition, and everywhere have they most signally failed. As a dernier resort they have now selected the Nevada Legislature. The Cutter Resolutions are introduced, but the able report of our Committee on Federal Relations, to whom they were referred, punctured that bubble, and they fell back upon the cunningly-devised substitute of my somewhat credulous friend from Douglas, Mr. Epstein—who, by the way, I am confident really believes his substitute is somewhere near the fair thing. I would not charge him or any gentleman on this floor with the intention of wrong doing; but I do implore him, and others who act with him, to pause before it be too late, and help to arrest this blow aimed at the prosperity of the State of Nevada, and the advancement of our whole country.

## WELLS, FARGO &amp; CO. OPPOSE IT.

I know full well, sir, that strong influences are at work to pass these resolutions. The great Express Company of Wells, Fargo & Co., at the head of which, on the Pacific coast is Louis McLane, the proprietor of the Pioneer Stage line, and owner of toll roads directly and disastrously affected by the Pacific Railroad, has been busy at work through their agents. Those agents are numerous, popular and powerful—and no effort of theirs has been or will be spared to carry these resolutions through this Legislature. They know full well in what manner their adoption will retard the building of the Pacific Railroad, and continue them in the enjoyment of a monopoly of the bullion, express and passenger trade of this State with California. I do not blame these men, for there is no nerve in the whole system so sensitive as the “pocket nerve.”

## LATROBE RAILROAD NO FUNDS.

I have listened patiently to all that has been said by the friends of the Latrobe Railroad, and have examined critically the “Report” so carefully and yet so unfortunately prepared by their “Chief” Engineer; but have failed to find or hear of any authentic statement of any money, bonds or funds of any kind by which they expect to build this great mountain road—confessedly one of the greatest undertakings of the age. The Central Pacific Company have frankly told us what means they have to rely on for that purpose. The rival to the Pacific Railroad have utterly failed in this respect, except that a body of nine “respectable” and “wholly responsible capitalists” have subscribed one hundred dollars each, and one stage agent or proprietor has subscribed \$91,000—altogether, enough, with good luck and good management, to build say one mile of road. Beyond this we have no evidence that they have a dollar even subscribed.

## CENTRAL PACIFIC COMPANY.

Sir: It is frequently said here and elsewhere that the work on the Pacific Railroad is not urged forward as rapidly as it should be. I am of the opinion, sir, that the California Pacific Railroad Company are entitled to great credit for the able and energetic manner in which they have conducted the work on their road. They have had many obstacles to overcome, but chiefest among them all has been the almost hereditary opponents to the Pacific Railroad, the same parties who now meet them here with these specious resolutions. The Capital of our State would now be fifty miles nearer the eastern terminus of the Central Pacific Railway had it not been for the machinations with which these shrewd, far-seeing, designing men have surrounded every effort of that Company.

Gentlemen of the Assembly, we are prohibited by our Constitution from aiding directly in the construction of the Pacific Railroad. Let us not, then, in our character of representatives of the people, revile those who are doing all in their power to carry on the great work. Let us not insult them and ourselves by recognizing a clique of reckless adventurers as on a par with the national company. Let us not convey to the world the idea that there are two companies building roads over the mountains, when we know full well there is but one. Let us not pass these resolutions, and thereby authorize a general jubilee among those who are fattening upon the rich spoils of a monopoly of our trade.

## CONCLUSION.

Mr. Speaker, it does not become me longer to detain you, and I shall take my seat after stating in general terms my views of our requirements to make this, the newest of States, at an early day one of the most populous and powerful. We are now but the silver fringe of the golden garment worn so regally by our elder sister, California. And so shall we be until we are connected

by steam communication with the waters of the Pacific ocean. Then Nevada shall put on the silver mantle, and California shall become but the golden hem to her magnificent vestment. The Star of Empire has westward taken its way, across the American continent, until from the extreme West it has looked wistfully out upon the Pacific sea, then returning eastward rests for a time over the new State of Nevada. We are here, sir, in the character of Representatives of this young Commonwealth, her first Legislative Assembly, to assist in laying broad and deep the foundations of her future prosperity and greatness. It behooves us to take heed, lest in an unguarded hour we so act and vote as to work an injury, we can never repair, to the most vital interests of the people we represent—the railroad interest. It is a measure of paramount importance that steam communication with the waters of the Pacific be established at the earliest possible day: Until that consummation Nevada is not the peer, but the vassal of California. Once connect this State by rail and steam with the navigable waters of California connecting with the great sea, and then, not till then, are we on terms of equality with other States and other countries. We can then claim our share of the profits of the trade and commerce of the world. And the whole world will hasten to exchange with us for the chief production of Nevada—gold and silver. Our hardy, adventurous American miner, the pioneer of civilization, has in pursuit of the industrial maxims, unattended and unarmed, except with the implements of peaceful labor, gone far out into this great Sahara of America, pitched there his tent and waits patiently, as he may, and hopefully, for wise, liberal legislation at our hands to bring to him the means to turn into the coffers of the world the untold, undeveloped wealth at his feet.

It has been my pleasure, sir, since my early settlement in this State, to travel very extensively over our plains, valleys and hills, throughout our wide-extended domain,



and from an intimate personal acquaintance with the mineral resources of our State, I venture the assertion that Nevada can furnish employment in her mines for five millions of laborers—so soon as steam transportation over the mountains separating us from the sea shall take the place of the slow and expensive means now employed.

Sir, let us rise to the dignity of the positions we occupy. Let us reject these resolutions as baneful to the greatest interests of Nevada, and thus rebuke these bad, designing men, who would build up their own fortunes by impoverishing a whole people. Let us this day do our State an incalculable good, ourselves a lasting credit, by linking our names with this beneficent measure of the Federal Government, and in all this do the world a benefaction.



## PACIFIC RAILROAD.

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SECOND SPEECH OF THE

HON. D. H. HASKELL,

BEFORE THE NEVADA LEGISLATURE,

February 21st, 1865.

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MR. SPEAKER: This Railroad question has now occupied a good deal of the time of this Legislature, and the importance to the people of this State of railroad communication with California seems to justify it.

It may not be amiss at this time to briefly refer to the different phases it has assumed since its first introduction by the friends of the Latrobe Railroad.

### CUTTER'S RESOLUTIONS.

Early in the session, Mr. Cutter introduced resolutions strongly endorsing the Freeport speculators, declaring that place to be at the head of tide-water on the Sacramento river—a notorious untruth. The preamble contained a bitter attack upon the Central Pacific Railroad Company, and a fulsome commendation of the Latrobe Company. Those resolutions were referred to the Committee on Federal Relations, who in a brief report pointed out the errors and their dangerous character. This report completely demolished the resolutions, and they have not been heard from since.

It stated one significant fact, that no company had been organized to build any railroad on the Placerville route east of that town. The result was that the Freeport speculators immediately went through the form of organizing a Railroad corporation at Placerville, under the high sounding title of

## THE SAN FRANCISCO AND WASHOE RAILROAD COMPANY.

As the contemplated Railroad does not go within about 200 miles of San Francisco, that name was probably inserted to add dignity to the bubble, and lead us to suppose that it was an affair in which the capitalists of that great city took an interest. An examination of the articles filed by the company shows, however, that it was gotten up exclusively by the would-be millionaires of the magnificent city of Placerville, nine of whom signed the munificent sum of \$100 each to its stock—the tenth gallantly putting down his name for \$91,100, to save the trouble of hunting up any more \$100 subscribers. He would probably as cheerfully have put it down \$900,000, if necessary, and would be as able to pay one as the other.

But, Mr. Speaker, that splendid bubble was floated over here to astonish the natives of Nevada, until the former remarks made on this subject, by gentlemen on this floor, pierced it with the lance of reason, and it then virtually dissolved in thin air.

### BISHOP'S REPORT.

But, sir, this corporation existed long enough to have a report addressed to it by one Bishop, who, by the way, adds "Civil Engineer" to his name. I am sure he is not "uncivil," for he certainly is one of the most accommodating engineers to his employers that I ever heard of.

All other attempts to deceive this Legislature having signally failed, this report, accompanied by some neatly drawn maps, was heralded with a grand flourish of trumpets. We were compelled to wait some time for the document to find its way through the press, but it came at last.

We were told that it proved to a perfect demonstration that the route over the mountains by the way of Placerville, was the finest for a Railroad yet discovered, and that the Dutch Flat route was perfectly impracticable. It came. We read it. He tells us that the reported survey was not made by himself, but by Mr. Arnold, "who had sole charge of the location." But, sir, please bear in mind, this fact was no obstacle to his writing the report.

### ARNOLD TOO HONEST.

Probably Mr. Arnold lacked the brilliant imagination of Bishop, or he may have been too careful of his reputation as an engineer, to write such a report as was required by the Freeport adventurers.

At all events, Bishop was found equal to the occasion, and he wrote the report, in which he tells us that Mr. Arnold's survey

establishes the following advantages of the Placerville route "over all others yet reported," to wit: "*Cheapness in first cost of construction; lighter gradients; easier curves; less snow line, and less depth of snow.*" He further tells us that all this can be done, on a route over two of the highest mountain ranges on this continent, at an expense of only about \$63,000 per mile, about the same as Railroads over the level country at the East, where labor and material can be procured at about half the price they can here.

### BISHOP EXPLODED.

This simple fact, which any man of common sense can see without the help of an engineer, has completely annihilated this grand report that was expected to block the locomotives on the Central Pacific Railroad.

This exceedingly civil engineer left this bombshell right in the heart of his structure, to which my friend, Mr. Speaker Tozer, applied the match and he was "hoist with his own petard."

Why sir; it was seen at once that this statement of a most material fact, being false, no reliance could be placed on any of the statements of this remarkable paper.

Mr. Tozer is entitled to great credit, and the thanks of the people, for the skill with which he dissected this report and exposed its fallacies. It was well and admirably done, and his speech left not a peg to hang a defense upon.

### FRAGMENTS REMOVED OUT OF SIGHT.

The enemies of the Pacific Railroad have gathered up the skeleton, and promptly taken it out of sight. They have diligently gathered up the copies of the report which have mysteriously disappeared, and they are now as scarce as hen's teeth.

I admire their discretion, but, sir, so bold an attempt to deceive and mislead an intelligent body of men, was never before attempted.

The projectors of this scheme must have thought that this Legislature was lacking in ordinary common sense, and that it was only necessary to add the words "civil engineer" to a document, and have it endorsed by an agent of Wells, Fargo & Co., and the Pioneer Stage Company, with the "pass" of Swan's toll road upon it to induce us to swallow it without a wink.

### L. L. ROBINSON'S LETTER.

The report having thus failed to accomplish the object of these speculators upon our credulity, they promptly brought out their big gun in the shape of a letter from L. L. Robinson, the head



chief in this raid upon the Pacific Railroad. He modestly tells us that he has "had much experience—some twenty-five year's connection with railroads as an engineer—having examined personally all the engineering works of importance in Europe and the United States."

Mr. Bishop having fired off his small artillery and failed, must stand aside that this engineer who has *travelled* and seen Europe may try his hand upon the simple-minded legislators of Nevada.

### ROBINSON'S BASE ATTACK UPON JUDAH.

I have no doubt that every one of us (I admit I did), took up the letter from this man, who blows his own trumpet so furiously, with a feeling of curiosity, but I must in all candor say, I dropped it with a feeling of intense disgust. A more base, cowardly libel upon the memory of the late Chief Engineer of the Central Pacific Railroad, T. D. Judah, Esq., a man who stood at the head of his profession as a railroad engineer, could not have been concocted by the hand of man.

### THE STATE USED TO GIVE CHARACTER TO THE LIBEL.

Why, sir, I look upon the outside of the libelous paper and find it bears the imprint of "John Church, State Printer," and I ask, sir, is it possible that this State is to pay for the printing of such a foul, calumnious paper against the character of the man to whom *we*, of all others interested, are indebted for the explorations, surveys and congressional action, whereby we are enabled to have a railroad we so much need! Has the Legislature of Nevada ordered such a document printed? I am confident it never did, but I feel well assured sir, if such should be the case, its contents were never known or brought before us, or it would never have been done.

Has it been ordered by any committee, or any member of this Legislature; then, sir, I ask by what authority such an order was given? By what right, sir, do they entail such a disgrace upon this State, as is involved in the printing and circulation of such a paper?

### REVIEW OF ROBINSON'S LETTER.

Let me, Mr. Speaker and gentlemen, draw your attention for a few moments to a portion of its contents. He tells us that he knew Mr. Judah well, knew him for years, was his "intimate acquaintance." God save you and me, and all of us, from such friends, such "intimate acquaintances." I, sir, happen to have some knowledge of the facts, and am assured that he did know

the lamented Mr. Judah, to Mr. Judah's cost and utter ruin. That in certain railroad transactions in which they were interested, Mr. Judah supplied the brains, and Robinson took all the money, leaving the former poor, while the latter boasts of his wealth. But of their "intimate acquaintance" of late years, I must express my doubts. Mr. Judah's friends say, that he always expressed his contempt for this man Robinson, regarding him as his worst enemy, and as having defrauded him out of his just dues.

But, Mr. Speaker, I have no desire to speak of Mr. Robinson personally; yet, sir, I have the right, and I feel it to be a duty I owe to the memory of the dead, and for the good of our State, to investigate this document purporting to have been written by L. L. Robinson.

It tells us sir, that Mr. Judah informed him, his vindictive foe, that he was "convinced the route (via Dutch Flat), was a hopeless one," and that he "*opposed the location as it now exists*, and that he was paid \$100,000 by the Company not to state the fact that the Dutch Flat route was a hopeless one."

#### ROBINSON CONVICTED OF FALSEHOOD BY JUDAH'S REPORTS.

Let us see how much truth there is in this statement. I have carefully read the reports made by Mr. Judah in 1861, 1862, and in 1863, and the last one made only a short time before he left for the East, where he died, and have them now before me. On page 5, of the first report, after stating that preliminary examinations were made, and barometrical observations taken upon three different routes, he says:

"The *present line* pursues its course along an *unbroken ridge from base to summit of Sierras*, the only river crossing in the mountains being Little Bear River (a tributary of Main Bear River, about three miles above Dutch Flat), which is crossed at an elevation of fifty feet, and will require only about fifty feet span of bridge."

#### JUDAH FAVORED THE DUTCH FLAT ROUTE.

He then proceeds in the succeeding pages to point out in detail the peculiar advantages of the Dutch Flat route, being first the "remarkable regularity of the surface" of the country, by which the elevation of the summit of 7,000 feet is reached by a maximum grade of 105 feet per mile. Second—the absence of river crossings upon the line, one of the greatest obstacles to a railroad encountered in the mountains, as we all know. -

On this point he says, on page 8th:

"These observations demonstrated the existence of a route from Sacramento across the Sierra Nevadas, by which the sum-

mit could be attained with grades of 105 feet per mile; accordingly field parties were organized early in the Spring, and a thorough Railroad survey made, the results of which are embodied in the following report, developing a line with lighter grades, less distance, and encountering fewer obstacles than found upon any other route or line hitherto examined across the Sierra Nevada Mountains; and proving, by actual survey that the difficulties and formidable features of this range can be successfully overcome for Railroad purposes."

Third—That it entirely avoids the second or Eastern Summit of the Sierra, lying east of Lake Tahoe. On pages 10 and 11 he sums up the advantages of the line, as follows:

### ADVANTAGES ENUMERATED.

- 1st. It crosses the Sierra Nevada Mountains, and reaches the Truckee River, in 123, and State line in 145 miles from Sacramento.
- 2d. Big Bend of Truckee, or Humboldt Desert, is reached in 178 miles.
- 3d. It crosses the State at nearly its narrowest width.
- 4th. It pursues nearly a direct course from Sacramento to the Big Bend of Truckee.
- 5th. It forms a local road for the counties of Sacramento, Placer and Nevada.
- 6th. It commands and will perform the entire business of Nevada Territory, Washoe, and the Silver mineral region.
- 7th. It will also command the business of the newly discovered Humboldt mineral district, Pyramid Lake, Esmeralda, and Mono mineral districts.
- 8th. It crosses the Truckee Meadows at the head of Steamboat Valley, which, with Washoe Valley and Eagle Valley, connects with Carson Valley, enabling a branch road, with light grades, to be built to any point on Carson River.
- 9th. It reaches eastern base of Sierra Nevada in 11½ miles from Summit.
- 10th. It follows the valley of Truckee River, without obstacle, to Big Bend, or Humboldt Desert.
- 11th. It entirely avoids the second summit of Sierra Nevada.
- 12th. Its maximum grades are 105 feet per mile, or less than those of the Baltimore and Ohio Railroad.
- 13th. The grades down the Truckee will not exceed 40 feet per mile.
- 14th. The elevation of line is maintained, continuously to the summit—there being no down grade running easterly to Summit.

- 15th. A uniformly descending grade is maintained from the summit easterly to the Truckee, or eastern base.
- 16th. Encounters no elevated plateau of table-land at Summit.
- 17th. Running to and from summit with maximum grades, cannot have an extensive snow-line.
- 18th. Runs through extensive forests of Pitch and Sugar Pine, Fir, Cedar, and Tamarac, which latter two species of timber are abundant, and will furnish excellent cross-ties.
- 19th. Crosses no deep river canons or gorges.
- 20th. Its longest tunnel will not exceed 1,350 feet in length, and no shafting will be required.
- 21st. Shortest radius of curvature, 573 feet.
- 22d. Navigable waters of Sacramento River at all seasons of the year its western terminus; Washoe and the Grand Basin its eastern terminus.
- 23d. At Big Bend of Truckee, the line is in position to proceed *via* the Humboldt to Salt Lake, or follow the Simpson route to same point.
- 24th. *Saving in distance* over route *via* Madelin Pass and headwaters of Sacramento, as surveyed by Lieut. BECKWITH, from Lassen's Meadows, or Humboldt crossing, 184 miles.
- 25th. Saving in cost of Pacific Railroad line, taking Lieut. BECKWITH's estimate from Lassen's Meadows, or Humboldt crossing, as compared with cost of present proposed line, in thirteen and one half millions of dollars.
- 26th. Reduces the time of passenger transit to and from Washoe to 8½ hours. Passengers leaving Virginia Station at 5 A. M., will reach San Francisco the same evening.
- 27th. Saving in cost of transportation of freight to citizens of Washoe or Nevada Territory, ten million of dollars per year.
- 28th. Affords a market for low-class silver ores (now thrown aside), for shipment to Europe, from over 3,000 mining claims.
- 29th. Is advantageously located for an extension to Oregon.
- 30th. Completes first western link of Pacific Railroad, overcoming its greatest difficulties.

#### JUDAH ENDORSED BY RAILROAD MEN.

Mr. Judah, after completing his surveys over the mountains went to Washington with maps and profiles, showing the character of the line which had been selected by him. He was successful in procuring the passage of the Pacific Railroad Act, and as he was about leaving on his return to California, over sixty of the leading members of Congress, including such men as Erastus Corning, Thaddeus Stevens and others, among the most



active and prominent railroad men in the nation, joined in a letter to him in which they say: "Your explorations and surveys in the Sierra Nevada mountains have settled the question of practicability of the line and enabled many members to vote confidently on the great measure."

Such, sir, are the published statements of Mr. Judah, as to his own opinion of the line, and the opinion of others who confided in his surveys, as to the entire practicability of the route.

### ROBINSON CHARGES JUDAH WITH LYING AND FRAUD.

And yet, sir, here comes this Robinson in his letter and virtually tells us that all this is a lie, a cheat and a fraud, that when Mr. Judah published to the world his views of the result of his surveys, it was all a lie, deliberately told to deceive and defraud the company that employed him, Congress that granted the aid, and a confiding public, that looked with confidence to the speedy fruition of their hopes in the construction of a road.

### FALSITY OF THE CHARGE.

Who believes for one moment that Mr. Judah was guilty of such a stupendous fraud? What motive could he have had? No man in his senses will believe a word of it. Again, sir; who is this man Robinson that presumes to make this demand upon our credulity?

### ROBINSON CONFESSES HIS OWN FRAUD.

Why, sir, he stands convicted by his own confession of being a party to the alleged fraud. If Mr. Judah ever told him any such thing, if an honest man, he would have promptly made it public, told it to the company who were expending their money, to Congress who were aiding it, to the public who had reposed their confidence. But, sir, he does no such thing. He waits until Mr. Judah is in his grave and then, unctiously professing "intimate acquaintance," he endeavors to blacken his memory and ruin his character as a man and engineer. A baser act was never committed. I wonder sir, if the ghost of the departed Judah does not haunt his dreams.

A man who can thus attempt to ruin the character of the dead, is unworthy to be the associate of honest men.

### ROBINSON CHARGES JUDAH WITH BRIBERY.

As if he had no said enough, he not only charges Mr. Judah with this great fraud, but declares that he accepted a bribe not to expose it. A man take a bribe to cover up his own villainy; what necessity for that?

## HIS MOTIVES IN THESE ACTS.

But, sir, who is it that make such charges, and what can be his motives?

Mr. Robinson is interested in the Sacramento Valley Railroad and in the Freeport and Latrobe extensions of that road. He is therefore deeply interested in opposing the Pacific Railroad. He has labored diligently, in season and out of season, to delay and prevent its construction. Before Congress at Washington, among the capitalists of New York and Boston, before the Legislature of California, among the people of San Francisco, Sacramento and Placerville, he has been untiring in his efforts to prevent the Central Pacific Company from obtaining any aid, and failing in that, from negotiating their bonds, and obtaining the means to build their road.

He undoubtedly believes that his Railroad interests will be injured by the construction of the Pacific Railroad, and he, therefore, stops at nothing, not even falsehood and defamation of the dead, in his efforts to destroy the work in which we are all so deeply interested. What cares he for the reputation of Mr. Judah? He is dead and cannot defend himself against such base assaults. He hesitates not, therefore, to trample upon his character to subserve his own selfish purposes. Like the jackal, he robs the grave and feeds upon the dead.

## ROBINSON'S AUDACITY.

Yet this man has the audacity to obtrude his advice upon this Legislature. He advises us to pass the Epstein Resolutions, because they can "hurt no interest except the Central Pacific Railroad." There, sir, the venomous reptile shows its head. He wants us to pass those resolutions, because they will "*hurt*" the Pacific Railroad.

Do *we* want to "hurt" it? Do we want to destroy our only hope of a Railroad? Then take his advice and vote for the Epstein Resolutions, which have the claws of the cat hid under the meal. If I needed a reason for voting against these resolutions, this advice alone, coming from such a man, from such a source, would be a conclusive one.

## ROBINSON APES THE ENGINEER.

But, sir, he is anxious to emulate Bishop, and come the Engineer over us. He favors us with a statement of the cost of several railroads in the United States, and carefully doubles them for us, for fear we may not be up in our arithmetic. The very lowest price he puts is \$120,000 per mile on a road built over a level country, and the scale runs up from that to \$200,000 per mile, and he gratuitously gives us his opinion, that the Central

Pacific Railroad will cost from \$250,000 to \$300,000 per mile. That Company, who certainly should be presumed to know their own business better than their enemies, estimate the cost of their road over the mountains at \$90,000 per mile, and that sum will do a great deal of work. Probably they made a great mistake in not employing Robinson, who had traveled over Europe and the United States, and who would have figured out the impracticability of building any railroad over the mountains for them.

Such seems to be the only result that can be gathered from Mr. Robinson's letter. As he is undoubtedly conversant with the cost and estimates of the Placerville line, it is strange that he did not furnish some information about the cost of that line, a matter respecting which he is presumed to know something, instead of the cost of the Pacific line, respecting which he knows nothing.

### ROBINSON DEMOLISHES BISHOP.

If the Dutch Flat line is going to cost so much, it is clear that the Placerville line cannot be built for any less, as it goes over two mountain ranges instead of one.

We can, therefore, safely conclude, that, in the opinion of this traveled Engineer, the Placerville road will cost at least \$300,000 per mile, instead of \$63,000 as figured up by Bishop (the untraveled). This is another demolisher of Bishop's Report. Well may Bishop say, "save me from such friends."

### THEY DON'T INTEND TO BUILD PLACERVILLE ROAD.

Mr. Robinson in his carefully written letter nowhere states any intention to extend the Placerville Road over the mountains, or even that it is practicable, and as I have shown, he evidently considered it impracticable, for when he talks of a railroad to cost \$300,000 per mile, he may as well say impracticable at once.

But, gentlemen, the result of this examination is, that this letter proves that we can place no reliance upon the assertions that the parties intend to build a road over that route, and every fact which comes to our knowledge only confirms it. Why, therefore, should this Legislature convey to the world by its resolutions a false impression to the contrary?

### CHARACTER OF ROBINSON'S LETTER.

There are many other statements in this letter which might be noticed, but I have said sufficient to show its black-hearted character, and that it is utterly unworthy of credit in any par-

ticular. I envy not sir, the head or the heart of the man that wrote it. The finger of scorn and contempt should be pointed at him by every honest man.

In conclusion, I will say, I have briefly reviewed the various attempts made by the enemies of the Pacific Railroad to induce this Legislature to assist them in their efforts to break down the only Company laboring in good faith to build the Road on which this State is so dependent. And again, sir, I say I trust this Legislature will not be guilty of so suicidal an act.



EXTRACTS  
FROM THE SPEECH OF THE  
HON. H. A. YOUNG,  
BEFORE THE NEVADA LEGISLATURE,  
FEBRUARY 21, 1865.

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Sir, the project of building this great national highway, the Pacific Railroad, has been the pet measure of the people of this coast for the last sixteen years. California has gone upon her knees to Congress at every session since her voice was heard in the national councils, asking for aid sufficient for the construction of the work. Congress, at the very time of political and pecuniary embarrassment, at the very time when we could least expect it, pledged the faith and support of the nation to its speedy completion. Three years of quarreling and wrangling over routes have passed, and we are only thirty miles nearer railroad communication. What a commentary is *this* upon the good faith of a people who have so persistently begged and supplicated Government to lend its strong arm to our assistance! I think I may safely affirm that we should not have been without railroad communication to-day, but for a certain organized opposition to the Central Pacific road. Who is responsible for this delay? Let the *enemies* of the people's pet measure answer.

CONGRESS SELECTED DUTCH FLAT ROUTE.

Men, whose pecuniary interest lay neither in Placerville, Dutch Flat nor Sacramento, have passed upon the surveys of the different routes, and our Representatives in Washington, after ten years of careful investigation, in their judgment have decided the Donner Lake Pass the most feasible, and have voted material aid in accordance therewith. With most earnest zeal did we labor for this result. Our every plea to the Government was "give us the railroad." Where it should run, by what town or through what pass, was no part of our petition. With an eye single to its earliest completion, was the present established survey chosen. With a view to its future military importance, as the right arm of the nation, as well as our safety and pecuniary benefit, it behooves every member on this floor to give it his moral support.

## WHO OPPOSE THE PACIFIC RAILROAD.

That contemptible quality of human nature, "envy and selfishness," was never more fully illustrated than by the measures of the opposition to this Central Pacific Railroad. The hordes of toll road owners, ranchers and stage owners, who have joined hands against this greatest and grandest work of the present age, California's "first love," and the adopted child of the Nation, would prevent the laying down of another rail for the next twenty years, if thereby, they were enabled to collect toll from the traveling public. I wish to call the attention of this House to one very important feature in all this railroad discussion. The friends of these resolutions proclaim to us most emphatically, that "they are *railroad men*;" that they care not which road is first built, and that the foundation of their whole action is a desire that one or the other shall be built at the earliest possible time. Not one of these Latrobe men have I ever heard make a favorable remark of the Central Pacific Railroad. On the contrary, they seize upon every opportunity to slander its officers, misrepresent its affairs, and bring into general disrepute everything connected therewith. Sir, I should justly have reason to suspect the motives of any man that should attempt to ride into popular favor at the expense of my good name. If our wealthy Latrobe friends, as they claim, have a route so much more feasible, a lot of officers so much more honest, a body of capitalists so much more *respectable*, let them go on and build their road and we'll travel it, and I trow it will pay them much better in the end, than sending lobbyists over here to hang around this Legislature through a whole session, to lobby through such resolutions as these.

## THE MEANS THEY USE.

That the General Government will yet further become a party to the completion of this work, I have no doubt—but not in the manner proposed by these resolutions. Sir, the gross misstatements of its organized enemies are sufficient evidence that they wish not merely to strike hands with the Pacific Railroad incorporators, but to play upon our credulity, to use us as a tool, "a willing cat's paw." What anxiety do they manifest to secure our services? First, they send us over from headquarters a liberal supply of very "choice literature." After we have read and digested it thoroughly, for fear we have misapplied the information so valuable, over comes a squad of very "*influential business men*" to inquire after our welfare; men who are known to have a peculiar faculty of lobbying around Legislatures; men who are posted (healed) and can tell us how to vote; men who are plethoric with *material arguments*. Some of the statements of the enemies of this road are of little consequence, and

in the face of "stubborn facts" to the contrary, not worthy of notice. It is no uncommon remark from members of this House that *this* or *that* survey was made upon the back of a mule; that *this* or *that* route looks very well on paper; that *such* a report was written out from an imaginary survey. I find in the remarks of the gentleman from Lander (Mr. Sine), made some weeks since before this body, these words: "Is it true, then, that this great Pacific Railroad enterprise is, in fact, a mere feeder to a toll road?" "Such, indeed," he says, "seems to be the case." The absurdity of the remark is apparent when you consider that the General Government is *the* party to the building of this road—not Leland Stanford, Louis McLane, "or any other man." If the above assertion had been made of the Latrobe road, I should consider the remark entirely within the limits of a lawyer's license. The champions of neither route will gain prestige to their cause by anything so uncalled for.

### BUILD ONE ROAD FIRST.

We have asked Congress to aid us in building *one* road across the Sierra Nevadas. Is it consistent to ask them at this time to build two? It has been told us, that the great amount of business to be done demands two roads—that one road would be a monopoly. Let us direct our united energies to the completion of one road first, and if such road should prove to be insufficient, or a monopoly, the immutable laws that govern trade and capital, will soon direct *such* capital to the speedy building of another. I cannot say, sir, that I am pleased with the progress of the Central Pacific Railroad thus far since its commencement, but I am not ready to charge the tardiness of the work to the incompetency or mismanagement of its Directors. Two years ago I could not believe that a man could be found on this coast so suicidal as to raise his hand against this pet measure of the Nation. Alas! Not that one such should have been found, but their name is legion. But, the opposition to the Pacific Railroad stops not here.

### PIONEER STAGE COMPANY DISLOYAL.

I trust, sir, there is not a loyal person within the reach of my voice who has not been pained, and who does not regret that a disloyal company so rich and powerful as the Pioneer Stage Company, should have grown wealthy and powerful in our midst from the patronage of a loyal public. A monopoly whose plethoric coffers fatten the sleek carcasses of known enemies of our country. A company taxed less for the support of Government than any other on this coast, according to profits,

and capital invested. But, sir, that they should turn the engines of their wealth and power against the future welfare of the Pacific coast, deserves the withering rebuke of every honest man. Do they want the Railroad? No, sir.

### WHY THEY OPPOSE THE PACIFIC RAILROAD.

They would move heaven and earth to keep it where it now is, and, if it were possible, complete the famous Latrobe road six miles ahead, thereby securing the patronage of the traveling public, and their aim and object then would be accomplished. I am informed from very good authority, that the carrying of treasure and passengers from this State, nets the Pioneer Stage Company at the present time, one thousand dollars per day. By shrewd management, one-half can be spent to harrass and retard the progress of the Pacific Railroad, and a clear profit left of five hundred dollars per day. Three or five years of such income is no mean thing. How smoothly a quarter of a million a year carries a man over the indignation of public sentiment. How well it pays witnesses to swear falsely; testimony written over (x) "*his mark*."

### HOW THEY OPPOSE IT.

How well it pays to send agents to New York and England to trifle with the credit and good name of the Central Pacific Railroad Company. How well it pays to lobby resolutions through this Legislature, asking Congress to repudiate its own acts. It is unnecessary for me to remark here, the present political standing of the Senators and Representatives, who, in Congress, persistently voted against aid to this great national work up to the very date of the breaking out of this rebellion. Foreseeing what has already happened, their natural instincts forewarned them that here would be a strength and power, a bond of Union. But, sir, I may mention here (and it is a notable fact) that the grand moneyed Mogul of this opposition enterprise, Milton S. Latham, well known to be a man of like sympathies, by his moneyed influence with our piratical cousins across the Atlantic, neither brings aid to the Pacific Railroad nor to the cause of this Union.

### THE EPSTEIN RESOLUTIONS WRONG.

Mr. Speaker, for reasons already stated, I cannot vote for these resolutions. At the first blush I thought, and may have remarked, favorably upon the Epstein substitute. After mature deliberation it occurred to me that the prayer of that petition to Congress is neither consistent, well timed, nor likely to re-



ceive notice. If, by so doing, the time to our railroad communication east or west, with tide water, would be shortened a single day, I could give them my hearty support. The people of the young State of Nevada, whom we have the honor to represent in this Legislature, imperatively demand of us, as guardians of their interests, that we carefully scrutinize a measure of such vital importance. The only question for us to decide, in the consideration of this matter, is whether it is easier to build one road or two; whether, by encouraging a rival, Eastern capital will more certainly seek investment in the original road. For the manner in which we decide, we shall be justly held to a strict account. I do not believe there is a member of either branch of this Legislature, that has the faintest hopes that so inconsistent a request as this will receive any notice at Washington. Such is the universal remark of every member that I have conversed with upon the subject. For what, then, are we wasting the limited time of this session? For what are we squandering the people's money, at the rate of one thousand dollars per day, in lengthy discussion and wrangling debates? The subject matter has been before us for the last sixty days, and there is scarcely a member on this floor that has not taken occasion to make a set speech, either for or against. I hope sir, that we have at last come to the end of the chapter—that we shall, at this time, indefinitely postpone these resolutions, and thereby do ourselves credit.

# CENTRAL PACIFIC RAILROAD

OF

CALIFORNIA.

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## REPORT

OF

GEORGE E. GRAY,

LATE CHIEF ENGINEER OF THE N. Y. CENTRAL R. R.,

UPON

THE CONSTRUCTED ROAD

AND

THE LOCATED ROUTE,

MADE

JULY 31, 1865.

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SACRAMENTO:

H. S. CROCKER & CO., PRINTERS, 92 J STREET,  
1865.



OFFICE OF THE CENTRAL PACIFIC R. R. Co. }  
OF CALIFORNIA, }  
SACRAMENTO, July 10, 1865.

MR. GEO. E. GRAY—

*Late Chief Engineer of the N. Y. Central R. R.:*

DEAR SIR: This Company is now actively engaged in the construction of a Railroad over the Sierra Nevadas, one of the highest mountain ranges, traversed by any railroad, on this Continent. The work is one of great magnitude, and National importance, and we desire to obtain the benefit of your views, in relation to the best mode of prosecuting the work, as your long experience as a Railroad Engineer, acquired as Chief Engineer of the New York Central, as well as other roads, will render your opinion of great value to us. We wish, therefore, you would make a thorough and careful examination and inspection of the work already completed, and the line as located and in process of location by our Engineers, and favor us with your views thereon.

Yours, most respectfully,

LELAND STANFORD,

Pres't C. P. R. R. Co.





SAN FRANCISCO, July 31st, 1865

HON. LELAND STANFORD—

*President of the Central Pacific R. R. Co. of California :*

SIR : In compliance with your request, I have made an examination and inspection of the Central Pacific Railroad of California, commencing at the city of Sacramento, thence to Clipper Gap, which includes that portion of the Road now in successful operation, and from Clipper Gap to Illinoistown, which includes the portion in course of construction. I have also carefully examined the line as located from Illinoistown [since called Colfax] to the mining town of Dutch Flat.

From Dutch Flat, the end of the finally located portion of the line, I have traversed and fully examined the route as recently surveyed by your Company via the Donner Pass, over the Sierra Nevada Mountains to the Truckee River, on the Eastern slope of the Sierras, thence through the cañon to Crystal Peak, a distance of about thirty-six miles from the summit at the Donner Pass.

That portion of the Railroad constructed and in operation from the city of Sacramento to Clipper Gap, a distance of 43 miles, and which attains an elevation of 1,785 feet above the sea, will compare most favorably in every respect with any railroad in the United States. The road bed and mechanical structures are well constructed, ample provision being made for drainage, the cross ties are of redwood, and the whole laid with a rail of 60 lb weight per yard, and set in wrought iron chairs. The locomotives, cars and machinery are all of the first quality and of the best material, and are maintained in good order.

The grading, etc., from Clipper Gap to Illinoistown is pro-

gressing rapidly, a force of 3,000 to 4,000\* men, with a suitable proportion of carts and teams, being employed thereon. I should think this section could be ready for traffic by the first of October next.†

From Illinoistown the line is finally located, fully prepared for the work of grading, to the town of Dutch Flat, a distance of 14 miles, and 68 miles from the city of Sacramento. After carefully reviewing this portion of the route, I am sure the line of location has been well selected, keeping in view the elevation to be ultimately attained at the summit of the mountains, and the distance within which it is to be overcome.

The line from Sacramento to Dutch Flat, in general, is located and constructed on the route surveyed by the late T. D. Judah, Esq. From the latter place to the summit of the Donner Pass, another survey and examination has recently been made by your Acting Chief Engineer, S. S. Montague, Esq., on a different route from that taken by Mr. Judah. Mr. Judah's line ran from Dutch Flat, up the Bear River valley, thence to the South Yuba, and thence up the valley of the Yuba to the summit of the Donner Pass, encountering some very heavy work, including ten tunnels, of an aggregate length of 7,740 feet, averaging 774 feet each, with heavy grades, and failing to attain sufficient elevation to make the work easy.

Mr. Montague leaves Mr. Judah's line a short distance above Dutch Flat, thence diverging to the right and crossing the dividing ridge to the North Fork of the American River, thence along the slopes of the hills to Cañon Creek, thence up Cañon Creek to the divide between that creek and Bear Valley, at what is called Emigrant Gap, thence along the slopes of the hill sides of Bear Valley and the Yuba Bottoms to Crystal Lake, thence up the South Yuba to the summit of Donner Pass.

I did not pass over all of Mr. Judah's line through Bear Valley, but from a comparison of his maps and profiles, and a personal examination of the line surveyed by Mr. Montague, I have no hesitation in pronouncing the latter decidedly preferable in all respects; it being more economical of construction, including only six tunnels, of the aggregate of but 2,350 feet, and averag-

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\* Since increased to about 5,000. † It was completed September 1st.

ing less than 400 feet each. Besides, no loss of elevation is suffered, the grades are no heavier, and the line is shorter by about 5,000 feet between Dutch Flat and Crystal Lake, a distance of about  $22\frac{1}{3}$  miles.

From Crystal Lake to Summit Valley, and thence to the Summit at Donner Pass, the grades by the new line will be much less than the maximum, far less than on Mr. Judah's, and without any loss of distance, or requiring a tunnel of more than 1,350 feet at the Summit.

From Donner Pass, or the Summit, I followed Mr. Judah's line (the only one as yet run), to the junction of Donner Creek, the outlet of Donner Lake, with the Truckee River, a distance of  $11\frac{1}{2}$  miles. This line, from the Summit to the Truckee River, after passing a distance of about two miles of heavy work, around the face of the Donner Peak, is quite easy of construction, the descent being made all the way with a regular grade of 105 feet per mile, and without encountering any very formidable obstacles.

The recent surveys down the Truckee River, from the mouth of Donner Creek, through the cañon where the river pierces the Eastern range of the Sierra Nevadas, have developed an excellent line, with light grades, all descending eastwardly, and comparatively easy of construction.

The ease with which this Eastern range is passed by your route is one of its most important features. In addition to its other advantages, it enables you to pass rapidly out of the snow belt, and with a shorter snow line than could otherwise be attained. That portion of the line along the Truckee River will be comparatively free from snow, and by properly constructing your road over the mountains the snow will not form any insuperable difficulty in operating it.

The suggestion made in your recent annual report respecting the construction of that portion of your road lying along the Truckee River, from Donner Lake to the Big Bend, in advance of a completed line over the Summit, I deem an important one. It can be built within twelve months, and be profitably operated in connection with the Virginia and Truckee River Railroad in Nevada, while the more difficult portion of your mountain line



is progressing. The increased cost of constructing this portion, in advance of a completed line over the mountains, will be more than compensated by the advantages which it will secure. A temporary track along the present wagon road, from the head of Donner Lake to the Truckee River, in connection with the permanent road down the Truckee River, can be laid without costing much if any more than the track laying, as the present grade of the wagon road is uniformly level, and the alignment good. This would reduce the wagon and stage transportation six miles.

The survey made by Mr. Judah demonstrated the fact that a feasible route for a railroad could be obtained through the Donner Pass, and the recent more thorough examinations have shown that his line can be improved upon in many particulars, in alignment, in elevations, and in cost of construction.

In view of the developments made by recent surveys, it seems important that they should be continued as rapidly as possible, and I am sure that many of the apparently difficult and expensive points can be avoided or materially reduced, if sufficient time is given to secure better lines.

From the examinations I have made, having traveled the entire distance on horseback or on foot, I feel confident that your Railroad can be constructed over the Sierra Nevadas, with the laboring force you will probably be able to command in California, within two years from next Spring, and at a cost not exceeding the mountain work on the Baltimore & Ohio, Pennsylvania Central, New York & Erie, and Hudson River Railroads. In fact, it is quite a remarkable feature of your route, that so elevated a mountain range can be surmounted with such comparatively light grades and curves, and at a cost which will favorably compare with other important railroads, long in successful operation.

I am, very respectfully yours, etc.,

GEO. E. GRAY,  
Civil Engineer.

# REPORTS

OF THE

PRESIDENT AND CHIEF ENGINEER,

UPON

RECENT SURVEYS, PROGRESS OF CONSTRUCTION,

AND

ESTIMATED REVENUE

OF THE

## CENTRAL PACIFIC RAILROAD

OF CALIFORNIA.

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DECEMBER, 1865.



# OFFICERS

OF THE

CENTRAL PACIFIC RAILROAD COMPANY OF CALIFORNIA.

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PRESIDENT,  
LELAND STANFORD.

VICE PRESIDENT,  
C. P. HUNTINGTON.

TREASURER,  
MARK HOPKINS.

SECRETARY,  
E. H. MILLER, JR.,

GENERAL SUPERINTENDENT,  
CHARLES CROCKER.

ACTING CHIEF ENGINEER,  
S. S. MONTAGUE.

ATTORNEY,  
E. B. CROCKER.

DIRECTORS,

LELAND STANFORD, Sacramento.

C. P. HUNTINGTON, Sacramento.

MARK HOPKINS, Sacramento.

E. B. CROCKER, Sacramento.

E. H. MILLER, JR., Sacramento.

A. P. STANFORD, San Francisco.

CHARLES MARSH, Nevada.





Engineer's Office, C. P. R. R. of California, )  
SACRAMENTO, November 25th, 1865. )

*To the President and Directors of the Central Pacific Railroad of California :*

GENTLEMEN :—The location surveys for the Second Division of your road, which, at the date of my last Report, (October, 1864,) had been extended to Dutch Flat, were subsequently revised, and changes made, wherever any improvements were found practicable.

From Lower Illinoistown Gap a survey was made, following the American River slope of the divide, avoiding the tunnel at Bear River Gap, and connecting with the original line at Long Ravine, developing a very favorable line, but involving a loss of altitude of twenty-six feet in reaching the latter point. This loss, however, did not affect the maximum grades above that point, and the compensating advantages of better alignment and reduced cost of construction were largely in favor of the new line. After a careful location between the points named—giving the following results—this line was adopted :

Distance by old line.....	22,800 feet.
“ “ new line.....	20,600 “

Difference in favor of new line..	2,200 “
Difference in aggregate curvature in favor of new line.....	420°
Difference in cost in favor of new line.....	\$50,000 00
Difference in total rise of grade in favor of old line.....	26 feet.

Between Long Ravine and Dutch Flat, the original location has been generally adhered to. Some modifications of the line were made, improving the alignment, without materially increasing the cost of construction.

From Secrettstown Gap a line was surveyed, following the American River slope of Coldspring Mountain to Gold Run, but without satisfactory results, and the original location upon the northern slope of the mountain was adhered to.

At Tunnel Hill the line was so changed as to admit of an open

cut instead of a tunnel, as at first proposed. This change was made without any increase of grade or curvature, but at an additional cost of construction, as it was believed that the difference in the time required for the completion of the work, would, by permitting an earlier use of the road, more than compensate for the increased cost.

Other changes will be referred to hereafter under the head of construction.

During the Winter of 1864-5, but one small locating party was employed, and the field operations were confined to the line below Dutch Flat. Above that point, but one survey, extending to the summit of the Sierras, had yet been made—viz: Mr. Judah's Survey of 1861. His line, as described in his reports, followed the Bear River slope of the divide to the source of that stream, and thence, the valley of the South Yuba to the Summit.

A re-survey of the Bear River route, for a distance of nine miles above Dutch Flat, in the Fall of 1863, had developed a very heavy line, and a re-examination of the route, made in the spring of the present year, together with a careful study of the maps and profiles of the original experimental survey, led to the conclusion, that by the best location that could be made, the line would be extremely sinuous, involving ruling curves of the minimum radius allowed by Act of Congress, and would also be so much shortened that grades of one hundred and sixteen feet per mile, for a distance of nearly twenty miles, would be required, in order to attain the necessary altitude at the head of Bear Valley. The character of the work required to construct a road upon this line, though by no means impracticable, nor indeed, heavier than was originally anticipated, was certainly formidable, and rendered it desirable, if possible, to find a more available route. With this view, examinations of the American River slope were commenced early in the Spring of the present year.

From my own observations of the general topography of the country forming the southern water-shed of the South Yuba and Bear rivers, and the northern water-shed of the main North Fork of the American, and from such information as I could gather from others, I had been led to believe, that by following the latter stream and its tributarie, the Summit might be reached with a lighter grade, and with the additional advantage of a southern exposure for nearly the whole distance, and, possibly, a reduction in the cost of construction.

The results of these examinations and surveys, though not fully confirming my preconceived opinions respecting the practicability of the American River route, have nevertheless, been very satisfactory, leading to the discovery of a new route from Dutch Flat to Emigrant Gap, near the head of Bear River,

avoiding the heavy work on the Bear River line, and entering the valley of the South Yuba at an elevation that enables us to carry our line to the Summit with comparatively light grades, and avoid much expensive work which a lower line would have encountered.

I am indebted to the Report of Mr. L. M. Clement, Engineer in charge of location of Second Division, for the facts embodied in the following account of explorations and surveys that were made before the route for a location above Dutch Flat was determined upon :

"The examinations, commenced April 17th, 1865, were first directed to Cañon Creek, with the view of following up that stream for a distance of seven or eight miles, and regaining the Bear River slope by crossing the divide at or near Dutchman's Gap. Two lines were surveyed, one crossing the divide at the above named point, and the other following a tributary of Cañon Creek, and crossing the divide about one-half mile farther west. Both were found impracticable, requiring respectively, tunnels of two and a half, and two miles in length.

"Returning to Towle's mill, near Dutch Flat, and using a grade of one hundred and five feet per mile, we followed our former line to a point about one-half mile below Herbert's ranch, where we crossed Cañon Creek, and with a very good line, were enabled to reach a low depression in the divide between Cañon Creek and the North Fork of the American River, known as the Hog's Back. The line here passes near Bradley & Co.'s large reservoir, and turning sharply to the left, attains a comparatively uniform bench upon the American River slope. Continuing our line with the grade above stated, no serious obstacles were encountered until we reached Prospect Hill, a sharp spur forming the eastern slope of Little Blue Cañon, and distant about eight miles from Dutch Flat.

"The summit of this spur was two hundred and fourteen feet above our grade, and required a tunnel of over one-half mile in length. Carrying our line forward to Blue Cañon, about four miles farther, we found the grade at that point was too low to admit of a practicable crossing, the cañon being so narrow that we were unable to make the necessary curvature to gain the opposite slope.

"A reconnoissance of the country for a few miles beyond Blue Cañon gave very satisfactory results, and with an additional altitude at that point of about one hundred feet, the most serious obstacles could be overcome. Being unable to make a sufficient increase of distance to gain the desired altitude, a new survey, based upon a grade of one hundred and sixteen feet per mile, was commenced near Towle's mill and carried along the general route above described, attaining a sufficient altitude at Prospect Hill to enable us to pierce that spur with a tunnel of

four hundred feet in length, and giving a very satisfactory crossing of Blue Cañon.

"Subsequent surveys enabled us to reduce the grade for a portion of this distance, and still maintain a desirable location at Blue Cañon.

"Running down the left bank of this cañon for nearly a mile, our line turns abruptly to the left, and cutting Lost Camp spur, strikes the slope of one of the main tributaries of the North Fork of the American, known as Wilson's Ravine. Following the same, and crossing its tributaries, viz: Sailors' Ravine, Owl Cañon and Heath's Ravine, we reach the summit of the divide between Wilson's Ravine and Bear River, at a point called Emigrant Gap, distant about seventeen miles from Dutch Flat. For about four miles below this point we have been able to maintain an average grade of eighty-five, with a maximum of ninety feet per mile.

"There being no further question regarding the practicability of regaining the Yuba Valley via the North Fork of the American and Wilson's Ravine, it was thought best to continue the examination of the American River route towards the Summit. Diverging from the Emigrant Gap line about four miles below that point, we crossed Wilson's Ravine and made instrumental examinations of Six Mile Cañon and Lake Valley, following the latter to its head, and crossing the divide to the Yuba through Lake Valley Pass.

"The country passed over between Wilson's Ravine and the head of Lake Valley was very rugged in its character, being mostly a granitic formation, much broken, and presenting many formidable obstacles to the construction of a road.

"Though ascending this valley with a grade of one hundred and sixteen feet per mile, we found it impossible to reach the main North Fork of the American River by crossing the crest of the ridge, as we had hoped, and could only reach the Yuba by tunneling thirty-five hundred feet. This line was accordingly abandoned. Still desiring to test the practicability of the main North Fork route, we returned to the foot of Lake Valley, and thence made a reconnoissance along the southern slope of Bear Mountain for a distance of six miles, to Monumental Cañon, which we crossed and continued our line in a southerly direction until we reached the (so called) East Fork. The country over which we had passed, after leaving Lake Valley, as well as that before us at this point, was of the most rugged and formidable character, and as our line for nearly ten miles had been carrying us from instead of towards the Summit, and that too without enabling us to avail ourselves of the increase of distance by reducing the grades, it was determined to abandon this route above Wilson's Ravine, and return to the Ynba River line."

Subsequent examinations of the American River slope in the



vicinity of the Devil's Peak proved still more conclusively the impracticability of reaching the Summit by following that stream. For had the slope of the main North Fork, above Monumental Cañon been gained, it would only have been to reach, about midway of its height, a sheer perpendicular wall of rock, rising three thousand feet above the bed of the stream, along which the construction of a road would have been impracticable, within the limits of cost which such an enterprise will warrant. Above this cliff, which extends for two miles or more, the country in the vicinity of the Devil's Peak is scarcely less forbidding in its character, being deeply furrowed by narrow rocky cañons, and presenting otherwise many serious obstacles to a favorable location.

"Returning to Emigrant Gap, we ran an experimental line up Wilson's Valley to Bear Trap Summit, but though using a grade of one hundred and sixteen feet per mile, the grade line was two hundred and forty-seven feet below the surface of the ground at the above named summit, which could only be passed by a tunnel, thirty-five hundred feet in length."

Having thus become fully satisfied that our best route for location above Emigrant Gap lay through the South Yuba Valley, we entered upon a careful survey of that route. Not feeling confident of the practicability of maintaining an uniform grade from this point to the Summit, or even of making the distance indicated by the experimental surveys, our first surveys were based upon a grade of one hundred and five feet per mile; but encountering a very rugged country above Crystal Lake and finding that the maintainance of so high a grade was unnecessary to attain the desired elevation at the Summit, we dropped our line at a point opposite the New Hampshire Rocks, a distance of two hundred and fifty-four feet, vertical, and thence to the Summit, continued the survey upon a grade of eighty-five feet per mile. This lower line was subsequently extended back from the offset point to Emigrant Gap, upon the same grade, which by the later location has been in many places still further reduced.

"So much time had already been consumed in the experimental surveys, thus briefly alluded to, it was found that the location of the line to the Summit, now a matter of urgent necessity, in consequence of the rapid advance of the work of construction, could not be accomplished by one party before the commencement of winter. Accordingly on the 18th of July another party was organized and placed in the field to assist in the location of this portion of the line."

Mr. Robert L. Harris, to whom was assigned the work of location upon the eastern slope of the mountains, entered the field with a full party, July 12th. A fourth party, in charge of Mr. W. F. Boardman, placed in the field to assist in making

necessary experimental surveys between the Summit and the Truckee River, was disbanded after a service of sixty days. Before commencing the location from the Summit eastward, the following experimental lines were run :

First—From mouth of Donner Creek (continuation of Judah's Line) via Truckee River to Hunter's Crossing. Second—From Summit to Truckee River via Coomb's Ravine and north side of Donner Lake, joining first line about one and a half miles below Coburn's. Third—From Summit to mouth of Donner Creek (initial point of first line) following the general course of Judah's Line, via Strong's Cañon south side of Donner Lake and Coldstream, but increasing the distance sufficiently, by running farther up the valley of Coldstream, to permit the use of a maximum grade of ninety feet per mile, instead of one hundred and five as at first contemplated.

Examinations were made of a route from Donner Lake to Crystal Peak, via Prosser Creek, Russell's Valley, Little Truckee and Dog Valley, and also via Prosser Creek, west side of Little Dog Mountain and the Little Truckee to its mouth, connecting at that point with the first line via Truckee river.

These examinations demonstrated conclusively the superiority of the Truckee River line in every respect, and it only remained to decide upon the most eligible route from the Summit to the valley of the Truckee. The choice lay between the two lines already mentioned. The one bearing to the left from the Summit Pass, and running north of Donner Lake, the other bearing to the right, and running south of Donner Lake. They are designated respectively as the North and South Lines.

The principal difficulties to be encountered in the work of construction upon either of these lines, occur within a distance of two and a half miles from the Summit; the descent for the remaining portion of the distance being accomplished with uniform grades, good alignment and easy work.

After a thorough survey of all the approaches to the Summit Pass, a careful location and estimate of the most difficult portions of the North and South lines, resulted in the choice of the latter. The reasons governing this choice were, first, lighter maximum grades, and secondly, less cost of construction on the adopted line.

The survey of the North line was based upon a grade of one hundred and five feet, and the South line upon a grade of ninety feet per mile. These grades can be reduced respectively to ninety-eight and eighty-five feet. Besides the consideration of grades, alignment, and cost of construction, the question of possible obstruction by snow, formed an important element in the comparison of the merits of the two lines. In this respect, the North line doubtless possesses some advantages, though upon a

careful consideration they are of much less importance than would at first appear.

The heavy snowfall in the immediate vicinity of the Summit, amounting in the aggregate to ten, and sometimes even twelve feet in depth, and a much heavier accumulation at some points by drifting, will render it necessary to provide a substantial protection, either of timber or masonry, to ensure the successful and uninterrupted operation of the road during the winter months.

The principal points requiring such protection occur upon the eastern slope, and within two miles of the Summit; and though the liability to a heavy accumulation, of snow is apparently much greater on the South, than on the North line, there is but little difference in the cost of an adequate protection for either.

In consequence of the North line having a southern exposure for a portion of its length, the snows will melt more rapidly than upon the shaded hillside of the corresponding portion of the South Line. Yet during the prevalence of the storms, when the real difficulty of operating occurs, the necessity of a protection against snow, or the labor of removing it from the track, will be as great in the one case as the other.

The objection at first urged against the South line, from the apprehension of danger from 'snow slides' along the northern face of Donner Mountain has been entirely obviated by the location surveys. At the only point where any real danger of obstruction from this cause existed, the line has been thrown so far into the hill that the entire road-bed will be cut in the solid granite, and so protected by masonry and timber work, that any 'slides' that may occur will pass harmlessly over the track without interfering in the least with the passage of trains.

That portion of the line requiring this rather unusual protection, does not exceed one hundred yards, and with the road properly constructed, I do not entertain the slightest apprehension of any stoppage or disturbance of trains from the causes alluded to.

The engineering difficulties here encountered are far less than have been met upon many portions of your road already constructed, and I allude to this particular point thus in detail, only for the reason that much doubt has been expressed regarding the practicability of operating a road along this mountain side during the winter months.

Before leaving this subject, I will remark, that our location has developed a line much more favorable for overcoming the difficulties incident to the snow-belt than was formerly anticipated. Lighter grades and better alignment are secured, as we approach the Summit, and for the greater portion of the distance through the snow-belt, the road-bed will be formed by

light side-cutting or embankments, thus greatly facilitating the removal of snow from the track.

The most important features of the North line having been noticed in a former Report (dated September 30th, 1865), a repetition here is unnecessary. The South line will be more fully described in its proper place, under the head of Location Surveys.

Mr. Harris commenced the work of final location of the Third Division early in October, and at the present date has carried his line as far as the Truckee Cañon, and by the 20th proximo will have reached Crystal Peak, Nevada, about six miles from the point of crossing the State line.

## LOCATION OF SECOND DIVISION.

The limits of the first and second divisions (heretofore alluded to as comprising fifty miles each) have been changed as follows: The first division to extend from Sacramento to Colfax, fifty-four miles; the second division, from Colfax to the Summit, fifty-one and one-half miles; and the third division, from the Summit to the State line, thirty-two and a half miles.

A detailed description of the located line below Dutch Flat has been given in a former Report, and the late changes in the line have already been referred to in the preceding pages.

The terminal point of the location survey of 1863, was at Station 3610, nearly opposite Dutch Flat. In consequence of the change of line, already noted, from the Bear River to the American River slope, a slight modification of about one mile of the old line became necessary. From Dutch Flat to Emigrant Gap the route of the new location, as already briefly noticed in the account of preliminary surveys, lies via Reservoir Gap and Cañon Creek, to the Hog's Back—thence along the slope of the North Fork of the American River via Blue Bluffs, Little Blue Cañon, China Ranch, Horse Ravine, Blue Cañon and Lost Camp Spur to Wilson's Ravine, and following the latter and crossing Sailors' Ravine, Owl Cañon and Heath's Ravine, reaches Emigrant Gap, in a distance of seventeen miles from Dutch Flat. Crossing the divide at Emigrant Gap, with a cut but ten feet in depth, and passing along its northern slope, which for about two miles forms the southern water-shed of Bear River, the line enters the valley of the South Yuba, which it follows to the Summit, a distance of twenty miles.

The general character of the work between Dutch Flat and Owl Gap, a distance of thirteen miles, does not differ materially from, and will not exceed in cost of construction, the work for an equal distance below Dutch Flat, the construction of which,



commenced in August last, will be nearly or quite completed during the present year

Five tunnels, of an aggregate length of eighteen hundred feet (the longest being six hundred feet), occur on this portion of the line. The material through which they will be excavated, is soft slate, cement, and conglomerate. These tunnels, with perhaps one exception, will require a lining of masonry.

The water courses, which with the exception of Cañon creek and Blue Cañon, are all small, will be provided with substantial stone culverts, and no trestling or other bridging will be required between Dutch Flat and Crystal Lake.

From Owl Gap to the Summit, a distance of twenty-four and one-half miles, the work is of a much less expensive character, and a good location has been made upon a grade of eighty-five feet per mile. From Owl Gap to Emigrant Gap, a distance of three miles, and thence for four miles along the northern slope of the divide to the Yuba Pass, the work will be light. From the Yuba Pass to Holt's Ravine, the cuttings, though generally light, are mostly in granite or gneiss, and for a short distance in the vicinity of Butte Cañon, in trap. For nearly three fourths of the distance between the Yuba Pass and Holt's Ravine, the work will consist of light side cutting and embankment, and between Holt's Ravine and the Summit, almost wholly of the latter. Two tunnels opposite Coolbroth's and Jones' of three hundred, and two hundred feet, respectively, will be required. Trestling will probably be required at Butte Cañon and Holt's Ravine. Both those crossings will be at a height of seventy feet, and five hundred feet in length. These, with truss bridges in single spans of one hundred and fifty, and two hundred feet, at the upper and lower outlets of Kidd's Lakes, and a single span of one hundred feet across the South Yuba at the foot of Summit Valley, are the only wooden structures required on this division.

The line through the valley of the Yuba is in every respect much more favorable than was originally anticipated. Light grades, good alignment, and work admitting of rapid and economical construction constitute its most salient features.

### THIRD DIVISION.

Before commencing the location of this division the determination of the line at the Summit was a question of the utmost importance. Although the grades upon either slope admitted of a location with a very light cutting at the Summit Pass, the surveys eastward, pointed to a lower summit grade, as calculated to greatly reduce the cost of construction, and afford better alignment over the most rugged portion of the line. After a



careful consideration of the matter, a tunnel of seventeen hundred feet in length was determined upon.

I will here state, that in addition to the lines heretofore noted in this connection, a line was run cutting the crest of the mountain one-third of a mile south of the Pass, and joining the present line about one mile from the Summit. This line requiring a tunnel of four thousand two hundred feet in length, and affording no advantages in regard to grade, was abandoned.

By the final location, the summit of the grade is made at the western end of the tunnel, and thence descends uniformly at the rate of ninety feet per mile for a distance of six and a quarter miles. Leaving the tunnel, the line bears to the right, and skirting the terraced slope of Donner Mountain and its main spur, for a distance of two and a half miles, enters Strong's Cañon. This portion of the line, heretofore alluded to, comprises all the formidable work on the eastern slope; two tunnels, through cement and granite, of four hundred and two hundred feet in length, respectively, occur within this distance. Running up the west side of Strong's Cañon, crossing the same, and thence along its eastern slope, the work for a distance of three miles will be extremely light, and the material of the most favorable character. Emerging from Strong's Cañon, the line passes along the hill-side south of, and about four hundred feet above Donner Lake, for two and a half miles, when curving sharply to the right, it pierces the hill with a tunnel nine hundred feet in length and enters Coldstream Valley. Thence to the valley of the Truckee, a distance of seven and three-quarter miles, with the single exception of Donner Creek crossing, the work is very light, and will compare favorably with the same length of line in the Sacramento Valley. The crossing of Donner Creek will be at a height of eighty feet above the bed of the stream, and a length of seven hundred feet at grade. The general characteristics of the line from Donner Creek to Hunter's Crossing are succinctly stated in the following items from the Report of Mr. Harris:

"The line follows the Truckee River at an elevation varying from thirty to one hundred and fifty feet above its bed—and the surveys have demonstrated the fact, indicated by a previous reconnoissance, that a line, very favorable for the construction of a railroad, can be obtained; the grades averaging less than forty, and none exceeding eighty feet per mile, with but three miles of heavy work, twelve miles of ordinary railroad work, and nineteen miles of very light construction."

The line, in this distance, crosses the river five times, requiring truss bridges at three points of single spans of two hundred feet each, and at each of the other points, probably, two spans of one hundred and fifty feet.

"Of the above river crossings, there is but one place where

the work will be expensive, which is at Devil's Grip—corresponding to the *Easterly Summit* of some other routes, as here the river cuts through the easterly chain of mountains."

The increased expense at the latter point will be incurred in the extra strength required for abutments and protection walls, to guard the embankments from the encroachments of the river, which is here confined to a narrow channel, and when swollen by rains or melting snows, acquires a velocity, which nothing short of the most substantial masonry will withstand.

The difficulties of the Truckee Cañon, heretofore so much dreaded, because so little known, have dwindled to three miles of heavy work, which can be built at less cost than the three miles next below Gold Run—on the Second Division—upon which, ninety days since, not a day's work had been done, and which half as many more working days will fully complete.

For full details, respecting the lines and work thus briefly alluded to, reference is made to the accompanying maps and profiles :

### LIST OF TUNNELS ON SECOND AND THIRD DIVISIONS.

LOCALITY.	Length in feet.	Material.	Probable time required for construction	REMARKS.
Boulder Hill.....	200	{ Cement and Conglomerate	60 days..	
Prospect Hill.....	400	{ Clay, slate & Cement.....	100 days..	Will require lining.
Fort Point.....	300	" .....	75 days..	" " "
Grizzly Hill.....	600	Conglomerate....	150 days..	A portion "
Lost Camp Spur.....	300	{ Slate & Sand- stone.. .....	100 days..	
Red Hill, above Crys- tal Lake.....	300	Schist .....	120 days..	
Opp. Jones' Station...	200	Granite.....	100 days..	
Summit of Sierras....	1,700	" .....	18 month:	Will be constructed for double track.
Cement Hill. ....	400	Cement.....	120 days..	" " " "
Mouth Strong's Cañon	180	Granite.....	90 days..	" " " "
Coldstream.....	900	Cement.....	1 year.....	" " " "
Devil's Grip. ....	175	" .....	80 days..	
Total feet.....	5,655			

Being less than one-third the aggregate length of tunneling contemplated by the original surveys.

The above tunnels can all be worked from both ends, and with the exception of the Summit Tunnel, will require no shafting.

## GRADIENTS AND ALIGNMENT.

In a former Report a table was given presenting the grades upon the located line from Sacramento to Dutch Flat. No material changes in grades upon that portion of the line have since been made. Above Dutch Flat, as before stated, the maximum grade of one hundred and sixteen feet per mile, for an aggregate distance of ten and a half miles, has been resorted to; the longest plane being 3 18-100 miles. The ruling curves upon this grade do not exceed eight degrees, or a radius of 716 feet, and upon all the long curves of this radius, the grade has been reduced from ten to twenty feet below the maximum.

But five curves of a less radius than seven hundred and sixteen feet occur between Dutch Flat and Emigrant Gap, viz: one at the Hogsback having a radius of six hundred and eighty-eight feet; one at Little Blue Cañon with radius of six hundred and thirty-seven feet; one at Stony Gulch, and one at crossing of Blue Cañon of the same radius, and one at Lost Camp Spur, having a radius of six hundred and seventy-five feet.

From Owl Gap to the Summit, a distance of twenty-four and one-half miles, the average grade is eighty-one, and the maximum eighty-five feet per mile. From the Summit to the Truckee River, the average grade is eighty-four, and the maximum ninety feet per mile, and down the Truckee, as before stated, the grades average less than forty and at no point exceed eighty feet per mile. The location upon the higher slopes of the Sierras has generally admitted of a very favorable alignment. Curves of 573 feet radius have in but a few instances been resorted to, and only at points where the grade could be sufficiently reduced to compensate for the increased curvature; and as before stated, the curves are generally lighter, and the per centage of tangent line much greater than upon the lower portion of the Second Division.

## WORK OF CONSTRUCTION.

The most satisfactory progress has been made in this department during the past year. Up to the first of January last, but little work had been completed above Newcastle, with the exception of the heavy cut at Bloomer Divide. The force employed, which in December, 1864, had been raised to about three hundred men, was still further increased in January and February, and the work prosecuted as rapidly as the inclemency of the season would permit. Steady additions were made to the working force as the season advanced, until in April it numbered about twelve hundred, in June two thousand, and the

latter part of July four thousand men. It became apparent early in the season, that the amount of labor likely to be required during the summer could only be supplied by the employment of the Chinese element of our population. Some distrust was at first felt regarding the capacity of this class for the service required, but the experiment has proved eminently successful. They are faithful and industrious, and under proper supervision, soon become skillful in the performance of their duties. Many of them are becoming very expert in drilling, blasting, and other departments of rock work.

The road was completed from Newcastle to Auburn—five miles—and the cars commenced running to the latter place May 13th, and on the 10th of June to Clipper Gap, seven miles further. Eighty days later, September 1st, the road was completed and trains ran to Colfax (near Illinoistown), distant eleven miles from Clipper Gap, and fifty-four from Sacramento.

August first, the work of grading above Colfax was commenced, but the full force employed below that point was not removed to the new work until September first. Considerable loss of time necessarily occurred in the removal of so large a force, and its proper distribution upon the line, yet the heaviest portions of the work were all well under way early in September, and at the present date, the grading upon the thirteen miles between Colfax and Dutch Flat—comprising some of the most expensive work on the line—is two-thirds completed, and with ordinarily favorable weather will be ready for the track in the month of January, 1866. The work at Cape Horn has proved less difficult and expensive than was first anticipated.

The line was thrown into the hill sufficiently to form the road-bed in solid cutting, with the exception of two points, where for a distance of one hundred and two hundred feet respectively, heavy retaining walls have been built, and the road made as secure as if upon the solid ledge.

The work of construction between Dutch Flat and Blue Cañon has already been commenced with a force of six hundred men, which number will be increased as the work below is completed.

Camps have been established at all the tunnels and heavy points on the section named, and it is confidently expected that by the opening of spring the grading will be so far advanced as to admit of its completion to Emigrant Gap early in July, and to Crystal Lake in the month of August. Work has been commenced on both ends of the Summit Tunnel, and will be prosecuted vigorously during the winter, and the heavy work upon the eastern slope will be opened as early as the season will permit.

I will here remark, that although a portion of the line on the Second and Third Divisions will require a longer time for its



construction, the cost of grading the thirteen miles next above Long Ravine is fully equal to the cost of the same number of consecutive miles upon any portion of the line. The rapid accomplishment of this heavy work can only be attained through the medium of that class of labor heretofore alluded to. Indeed had it not been for this element, it would have been impossible to have completed your road to Clipper Gap at this date.

With this force at your command, and with the assurance of its large augmentation the coming year, the work of construction, which by some has been deemed the labor of years, will be reduced to months, and judging from what has been accomplished during the past season, I confidently predict that within the year 1866 your trains will run to the summit of the Sierras, and by the fourth of July, 1867, to Hunter's Crossing of the Truckee, fifteen miles beyond the eastern boundary of the State.

Geo. E. Gray, Esq. (late Chief Engineer of the N. Y. Central Railroad), who examined the line of your road from Sacramento to Crystal Peak (Nevada), in July last, expresses the following opinion regarding the character of the work upon the completed portion :

"That portion of the Railroad constructed and in operation from the city of Sacramento to Clipper Gap, a distance of forty-three miles, and which attains an elevation of 1,785 feet above the sea, will compare most favorably in every respect with any railroad in the United States. The road bed and mechanical structures are well constructed, ample provision being made for drainage, the cross ties are of redwood, and the whole laid with a rail of 60-lb. weight per yard, and set in wrought iron chairs. The locomotives, cars and machinery, are all of the first quality and of the best material, and are maintained in good order."

Of the line upon the Eastern slope, he says :

"The recent surveys down the Truckee River, from the mouth of Donner Creek, through the cañon where the river pierces the eastern range of the Sierra Nevadas, have developed an excellent line, with light grades, all descending eastwardly, and comparatively easy of construction.

"The ease with which this eastern range is passed by your route is one of its most important features. In addition to its other advantages, it enables you to pass rapidly out of the snow belt, and with a shorter snow line than could otherwise be attained. That portion of the line along the Truckee River will be comparatively free from snow, and by properly constructing your road over the mountains the snow will not form any insuperable difficulty in operating it."



## BRIDGING.

But few timber structures have been found necessary. Those originally designed for crossing the deeper ravines and gaps, between Newcastle and Colfax, have mostly been discarded, and embankments built instead. The Newcastle trestling, sixty feet in height and five hundred feet long, one similar structure near Auburn, thirty-eight feet in height and four hundred feet in length; two of the same height at Lovell's Gap; one near Clipper Gap station fifty feet high and four hundred feet in length; two in Clipper Ravine fifty and ninety-three feet in height and three hundred and fifty, and five hundred feet in length, respectively, and one trestling of four bents at Lower Illinoistown Gap (introduced for the convenience of a road crossing), are the only wooden structures between Newcastle and Colfax.

Long Ravine bridge, consisting of five hundred feet of trestling in spans of sixteen feet, and extreme height of sixty feet, and three spans of Howe truss, two of one hundred and fifty feet each, and one of one hundred and twenty feet, crossing the main ravine at a height of one hundred and fifteen feet; and the Secrettown trestling, one thousand feet in length, nine hundred feet of which is fifty, and the remainder ninety feet in height, are the only wooden structures between Colfax and Dutch Flat. Beyond the latter place the structures required upon the second and third divisions have already been noticed.

The American River bridge has recently been covered and painted, and a similar protection will be provided for all truss bridges hereafter constructed.

## ROLLING STOCK.

The rolling stock upon the road consists of six locomotives, six first-class passenger cars, two caboose, one baggage and express, thirty-nine box-freight, and sixty-five platform cars. The materials for twenty dump cars have arrived and they are now being put together. A new locomotive, 16 by 24 inch cylinders and 5 feet drivers, built by Booth & Co., San Francisco, is expected to arrive in a few days.

Seven heavy freight locomotives, cylinders 18 by 22 inches, with six drivers each, four feet diameter, and one passenger locomotive, 15 by 22 inch cylinders, 5 feet drivers, have been purchased.

Advices have been received of the shipment of four of the above, and the others were to be shipped during the present month.

Orders have been given for four others of a similar class, cyl-

inders to be 18 by 24 inches, six drivers, four feet diameter. Materials for one hundred freight cars have been purchased and were to have been shipped the present month; and orders have been given for as many more, all of which are expected to arrive in season for next spring's business.

### GENERAL REMARKS.

The prospect of the speedy completion of your road to the eastern boundary of the State is most flattering. The financial difficulties incident to the initiation of all public enterprises of great magnitude, have been successfully overcome, and, as will be seen by the report of the Secretary, the future prospects of the company are highly encouraging.

The character of the line developed by the recent location surveys is remarkably favorable for rapid construction, and the comparatively low grades attained through the snow belt, divest it of its objectionable features.

The success attending the running of freight trains on the high grades upon the completed portion of your road is very gratifying, and fully sustains the opinions heretofore expressed that no apprehension of serious difficulties need be entertained in regard to the practicability of working a road constructed upon these grades.

The completion of the road to Dutch Flat will enable you to command the freight and passenger traffic with Nevada, Utah and Idaho, and its further advance into the mountains will add materially to the dispatch of business with those localities. The business of the past season as shown by the Secretary's Report, has been very satisfactory, and the discovery of the new mines in the Excelsior District, Nevada County, will tend to largely increase the business over your road the coming season.

These mines are situated within ten miles of the road at Crystal Lake, and though at present but partially developed, they bid fair to rival in extent and richness the famous Comstock mines in Nevada. Other developments of mineral wealth in various portions of Placer and Nevada counties are constantly being made, creating an active demand for labor and capital.

I omitted to mention in connection with the subject of experimental surveys, that a reconnaissance was made of the Henness Pass route from Bear Valley to the Little Truckee. The observations taken fully confirmed the opinion expressed by Mr. Judah in his report of 1863, in which he says:

"This line we found impracticable on account of the crossing of the South Yuba, and objectionable from the absolute necessity of making a long detour either to the north or south, in order to avoid Dog Mountain and reach the valley of the Truckee;

also from its moderately descending grade eastward and consequent high elevation through the snow region."

The altitude of this pass was ascertained by level and found to be 7,031 feet, or sixty feet lower than the Donner Pass. A railroad line carried through this pass would, from the necessity of constructing sufficiently above the natural surface to avoid obstruction by snow, attain a greater altitude than the summit grade of your road. These and other measurements were taken for the purpose of correcting the false impressions that have obtained, relative to the comparative altitudes of the most prominent passes across the Sierras. I will here state that these altitudes all date from low tide at San Francisco.

The altitude at Sacramento is taken from the barometrical calculations of Major Williamson and Thos. Logan, M. D., by which the new grade of Front street, Sacramento, (28 feet above low water mark), is made 56 35-100 feet above low tide at San Francisco.

The apparent discrepancy between the altitudes here given and those given by Mr. Judah, are due to the different bases from which the levels were taken—the latter being run from the old Front street levee as a base, and our present lines from tide water.

The following altitudes of prominent points upon the line of your road, also of Lake Tahoe and the Summit Passes of other routes, may be of interest :

Sacramento (Front street grade).....	56 feet.
Junction. ....	189 "
Auburn (Railroad station).....	1,185 "
Clipper Gap.....	1,785 "
Colfax.....	2,448 "
Jones' Mill, near Dutch Flat.....	3,416 "
Emigrant Gap.. ....	5,286 "
Grade opposite Crystal Lake.....	5,775 "
Surface of Water in Crystal Lake.....	5,997 "
Summit of Grade, west end of Summit Tunnel.....	7,042 "
Donner Lake.....	5,964 "
Lake Tahoe. ....	6,247 "
Webber Lake, near Henness Pass.....	6,904 "
Summit at Henness Pass.....	7,031 "
Summit at Donner Pass.....	7,091 "
Summit at Georgetown Pass (levels run from Summit to Lake Tahoe in 1863).....	7,154 "
Summit at Johnson's Pass (Bishop's Report).....	7,374 "

But one location party will be kept in the field during the winter. The location now completed to Crystal Peak, will be extended to the Big Bend of the Truckee, a distance of fifty miles, beyond which point the route of your road is not yet de-

terminated upon, and in the absence of reliable data, any discussion of the relative merits of the various proposed routes thence to Salt Lake, must be entirely speculative and unsatisfactory.

I need not, however, urge the importance of commencing the explorations and surveys necessary to an intelligent choice of route, at the earliest practicable moment.

The labor of several well organized engineer parties, will be required to make the necessary surveys during the coming year, and I would recommend that a force, adequate to ensure the early completion of the work, be placed in the field as soon as the season will permit.

I wish here to express my obligations to Messrs. L. M. Clement and Robt. L. Harris, and to those employed under their direction, for the faithful and efficient manner in which they have discharged the duties assigned them. My acknowledgments are also due to Messrs. Chas. Cadwalader and S. M. Buck, assistants in charge of construction, for valuable assistance in their department.

Very respectfully,

SAM. S. MONTAGUE.

112  
LANDS

OF THE

Central Pacific Railroad Co.

OF

CALIFORNIA.

SACRAMENTO :

H. S. CROCKER & CO., PRINTERS, 42 AND 44 J STREET.

1870.

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# Lands of the Central Pacific Railroad.

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The Central Pacific Railroad Company of California, was one of the Companies authorized by Act of Congress to construct a railroad from the Missouri river to the Pacific ocean—a part of the Continental railroad that extends from the Atlantic to the Pacific oceans. It was empowered by Congress to construct its road eastward from the navigable waters of the Sacramento river until it met and connected with the Union Pacific Railroad. This connection was made near Salt Lake.

## Its Lands.

The work of constructing this railroad was considered of such great national importance, that the Government of the United States, as also the Governments of the States through which it passes, have, by loaning their bonds to it, by grants and franchises and by friendly legislation, given their aid to its speedy completion. In addition to direct aid in bonds, and right of way over the public domain, etc., the Congress of the United States has given this Company an extensive grant of lands. Under the Pacific Railroad Acts of Congress, passed July 1st, 1862, and July 2d, 1864, there is granted to this Company every alternate section of public land, designated by odd numbers, within twenty miles on each side of its railroad, excepting, however, mineral lands, and tracts to which pre-emption and homestead claims had legally attached. This grant is equivalent to about twenty sections to each mile of the road, and as the sections contain six hundred and forty acres each, it amounts to twelve thousand eight hundred acres per mile, less the exceptions above noted. On the reserved mineral lands, the timber is granted to the Company. These Acts are in terms a present grant, and are, therefore, a full and perfect conveyance from the original source of land titles, the National Government.

### Mode by which Public Lands are Surveyed and Designated.

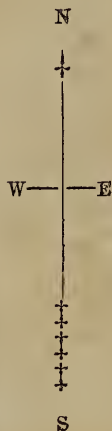
To persons not familiar with the public land system of the United States, it may be necessary to make a brief explanation of the manner in which they are surveyed, as, with an understanding of this, a definite idea will be had of the extent and situation of the Company's grant of lands.

The United States causes its lands to be surveyed by its officers into townships of six miles square; these townships are subdivided into thirty-six sections of one square mile each—or six hundred and forty acres. Each section is again subdivided into four quarters of one hundred and sixty acres each, and again into sixteen quarter-quarter sections of forty acres each, which is the smallest quantity sold, except fractions on the borders of rivers, lakes, etc. In making these surveys in California, Mount Diablo, a prominent peak near the junction of the Sacramento and San Joaquin rivers, was selected as the initial or starting point, from which four lines were run, two north and south called the meridian line, and two east and west called the base line, and from these lines the several townships are surveyed; those north and south being numbered from the base lines 1, 2, 3, etc., north or south of the base line as the case may be, and those lying east and west described in the same way, as east or west of the meridian line. Thus, the city of Sacramento is described as being in township eight north, of range five east, of Mount Diablo base and meridian; that is, it is in the eighth tier of townships north of the base line, and the fifth east of the meridian line.

The following is a plat showing the manner of subdividing and numbering the sections in each township:

*T. 8 N., R. 5 E.*

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36



### The Lands Granted to the Company.

From the Acts of Congress quoted, it will be seen that the Government has granted to the Company all the alternate sections designated by odd numbers, as 1, 3, 5, 7, etc., for twenty miles on each side of the line of the road, that had not at the date of the grant been otherwise disposed of by the Government; thus, as before stated, for each mile of road constructed it receives 12,800 acres.

### Process by which Title is Acquired.

As each section of not less than twenty miles of the railroad is completed and accepted by the Government, the Company makes a list of the lands to which it is entitled lying within twenty miles on either side of such completed section. This list, if found correct, is duly certified by the proper United States Land Officers and forwarded to the Land Department at Washington, where it is again examined. Upon this the patent is issued and thus the title of the Company is perfected.

### Even Numbered Sections Retained by the Government.

The minimum price of ordinary public land is \$1 25 per acre, or \$200 for a quarter section of one hundred and sixty acres, but from the fact that the construction of railroads increases the value of the land in their vicinity, a general Act of Congress provides, that when the alternate sections are donated to aid in the construction of a railroad, the remaining ungranted sections are increased in price to the "double minimum," or \$2 50 per acre, so that the even numbered sections within the limits of the grant to this Company can only be purchased at that price.

### Character of the Land through which the Road Passes.

The City of Sacramento, which is the western terminus of the Central Pacific Railroad, is situated near the center of the great valley of the Sacramento; it is in latitude 38° 31' north, and longitude 121° 29' west. It is the Capital of the State of California, and has a population of twenty-five thousand. From this city the general course of the railroad is northeast, over the river bottom and level prairie lands, a distance of twenty-five miles; at this point it meets the rolling timber lands and low hills that lie at the base of the Sierra Nevada mountains; reaching one of the main spurs of the Sierras it ascends to the Summit, a distance of one hundred and five miles from Sacramento, and at an elevation of 7,042 feet above the sea. At the crest of the mountains it passes through a tunnel and along the mountain side to the bank of the Truckee river. This river is the outlet of Lake Tahoe, whose surface is 6,247 feet above the sea; its waters flow northeast and empty into Pyramid Lake, one of the lakes of the Great American Basin, whose waters have no outlet to the ocean. The road follows the banks of the Truckee.



river to the Big Bend of the Truckee, a distance of one hundred and ninety miles from Sacramento. From this point its course is northeast until it meets the Humboldt river, which flows westward and also empties into the Great Basin. It follows up the banks of the Humboldt river to its source, and so on in the same general direction around the northern end of the Great Salt Lake.

### Alluvial or "Bottom" Lands.

From this statement of the route of the road it will be seen that the Company has every variety of land, situated in the different climates between semi-tropical and temperate. Near the City of Sacramento it has large quantities of what are called bottom lands; that is, lands that are overflowed by the swelling of the rivers and streams in Winter, and which are annually enriched by the deposits brought down by the water from the mountains. Like the Valley of the Nile, they produce yearly unvarying large crops, the deposit during each rainy season causing them to be inexhaustible in their fertility. They yield every variety of garden and field vegetable cultivated in a semi-tropical climate, including potatoes, onions, cabbage, pumpkins, beets, tomatoes, peas, and the various small fruits. Large tracts are annually planted with maize or Indian corn, of which large crops are produced. Many farmers have cultivated tobacco, which has always been found profitable. On these lands are also grown large quantities of hops, from the cultivation of which many persons have become wealthy. The hops produced are not excelled by any known in the markets of the world. From the fact that it never rains in this climate during the season they are maturing, they lose no portion of the extractive principle for which they are used, and are said by brewers and others who make use of them, to be from ten to fifteen per cent. more valuable than those grown in climates where there are Summer rains. Many plantations have been made on these lands with mulberry trees, which thrive almost without cultivation. It is found that the climate of California is admirably adapted to the silk worm, and that here it is not subject to the diseases that affect it in Europe. The weaving of silk goods has been commenced in California, and there are not as yet mulberry trees sufficient to supply the yearly increase of silk worms. It is expected that in a few years California will export silk. Many kinds of fruit are grown on these lands, such as the pear, apple, plum, cherry and peach. The largest peach orchards of the State are situated on "bottom lands."

### Wheat, Grazing and Orchard Lands.

Within the railroad grant, above the bottom lands, and less than twenty miles on each side of the road, and for the length of twenty miles, are the prairie lands. This is pre-eminently the wheat, grazing



and orchard section of the State. The land is level, without trees, or with scattering and small groves of oak; it has no underbrush, and with the first rains of November is, without any preparation, ready for the plow. If preserved from the herds of cattle and sheep it produces annually, without cultivation, large crops of native grasses and wild oats, which make excellent hay.

The exports of wheat from California within the past few years have attracted the attention of the world. From July 1, 1867 to January 1, 1868, there was received at San Francisco—the greater part from the interior of the State—4,579,736 centals of wheat, and the export—principally to the Eastern States and Europe—for the same period was 3,246,524 centals. The report of the Surveyor General of the State to the Legislature, shows that for the year 1866, 690,745 acres were cultivated to wheat, from which the product was 14,080,752 bushels, and 472,621 acres to barley, from which the product was 11,605,922 bushels. The number of acres cultivated to wheat in 1867 was 846,377, and to barley 354,873 acres; the statistics of the product have not as yet been reported. The greater part of these large quantities was produced in the great valleys and on the prairie lands. The principal sales by the Railroad Company have, thus far, been of this class of its lands, over 75,000 acres having been sold. There still remain unsold of the same kind of land quantities sufficient to support a population of 20,000. These prairie lands, in addition to producing wheat and the other cereals, are perhaps the best in the State for general farming and orchards. All kinds of fruit that will grow in a semi-tropical or temperate climate thrive on these lands, including the almond, olive, pomegranate, plum, pear and apple, as well as many of the nut bearing trees. They are also well adapted for grazing and dairy purposes. The native grasses start after the first Winter rains of December and grow to June, when they dry to hay in the rainless Summer and remain standing upon the ground until the rains of the following year. Farmers, therefore, are not required to cut and save hay for their dairy cattle, except for the short period between the early rains and the springing up of the new grass.

### Grazing Lands and Sheep Ranges.

Still going east along the line of the railroad, after leaving the prairie lands, the road passes over about twenty-five miles of rolling lands and low hills. These contain groves of oak trees, and many tracts are heavily timbered. In the more elevated regions of this section the oaks are intermixed with pines. The land in this section not only produces wheat and barley, but will, if not cultivated or too closely grazed, produce the native wild oats, which were found growing upon them at the time the Americans took possession of the country. Among these hills are

grazed large herds of cattle, horses and sheep. At a distance of twenty-five miles from Sacramento, on the line of the railroad and within a distance of fifteen miles on each side, more than fifty thousand sheep are grazed throughout the year. No hay is cut or saved for these sheep, or if any is given them it is for the short period after the first rains in December before the springing up of the new grass. The best sheep ranges of the State are in this section; the wild oats and native grasses are nutritious and abundant; the groves of oaks afford shade from the heat of the mid summer sun, and the numerous streams flowing through these hills give a plentiful supply of water.

### Vineyard Lands.

The success that in California has followed the cultivation of the European grape, has led to the planting of numerous vineyards. After an experience of eighteen years, the fact has been demonstrated that in no place do the various kinds of European grapes, both for wine and the table, thrive so well and produce such excellent qualities of wine and table fruit, as on the hills that lie at the base of the Sierras. The soil is composed of the worn down particles of granite, quartz and slate, intermixed with lime from the numerous bands of limestone that traverse the mountains. Since the European grape was cultivated in this State—and there are vineyards planted by the Jesuit missionaries that are ninety years old—no instance has been known of a failure of the grape crop. There are no frosts to injure it at the time it is in blossom, and no rain to injure the fruit during the period of ripening. Some of the largest vineyards in the State are on lands that have been purchased from the Railroad Company; many of them producing from two to ten thousand gallons of wine annually, and in one instance producing yearly over forty thousand gallons. More than two hundred varieties of the grape have been imported from France, Spain, Germany and Hungary, and been propagated in California. Every variety that is grown in Europe succeeds well in this soil and climate, and bears more abundantly than in its native home.

The usual manner of planting vineyards in California, is to plow the land thoroughly immediately after the early rains of December; holes are then dug with a spade, eight feet from each other in rows; in these holes are planted cuttings, or one year old rooted vines. Cuttings can be obtained for a trifle, and often without cost, of the kind of grapes most cultivated, at any of the vineyards during the season of pruning—January and February. One year old rooted vines can be purchased for four or five dollars per hundred. The vines are planted eight feet from each other for the purpose of working among them with a one-horse cultivator; and as laborers are scarce in California, this and all other branches of agriculture are most economically conducted, by

substituting the labor of animals for that of man. If the vineyard has been planted with cuttings, an average of from ten to fifteen per cent. fail to take root, and these have to be replanted the following year. If rooted vines are planted, not to exceed two or three per cent. will fail to grow. Each year the vines have to be pruned and the vineyard plowed; the vineyard should also be cultivated in May or June to kill the weeds. The third year the vines will commence bearing, and increase in quantity each year for a great many years. It has been estimated that the average annual production of all the vineyards in the State, of five years old and upwards, is one thousand gallons of wine to the acre. The process of making wine is as simple as that of making cider. The grapes when ripe are pressed, and their juice poured into clean casks, where it is left to ferment. In 1866, as shown by the report of the Surveyor General, there were made in California, one million seven hundred and ninety-one thousand six hundred and thirty-three gallons of wine, and one hundred and twenty-seven thousand one hundred and forty gallons of brandy.

### Raisins.

A new industry has been developed by Mr. B. N. Bugbey, on a piece of land purchased from the Railroad Company, near the town of Folsom; that is, the cultivation of the raisin grape, and the manufacture of raisins. The process of converting the grape into raisins is so simple that it can be done by children; when the grape is ripe the bunches are cut and spread upon boards in the sun, and turned each day until cured, after which they are boxed and forwarded to market. In 1867, Mr. Bugbey, in addition to making seventeen thousand gallons of wine and three thousand of brandy, also made thirty thousand pounds of raisins. Of the unsold lands of the Railroad Company, there are at least fifteen thousand acres, all of which is suitable for vineyards.

### Valley Lands Among the Hills.

Ascending the Sierras, and above the vineyard lands, the oaks give place to dense forests of pines, firs and cedars. In the valleys of these hills are numerous farms and dairies, as well as sheep ranges. In these valleys all the fruits of the temperate climates are cultivated with remarkable success. The principal field crops of this region are barley, potatoes, turnips and hay.

### Timber Lands.

The pine forests of these hills, in quantity and in the quality of lumber made, are hardly excelled on the North American Continent. They give employment to many saw mills and a large number of men. The construction of the railroad through this region has cheapened the price



of lumber, and in a large measure stopped its importation from other States. A large feature in the business of the railroad, is the transportation to the valleys of lumber for building and fences. The average price in the valleys for lumber for fences, since the construction of the railroad through the pine forests, is sixteen dollars per thousand feet. In a few years, when branch railroads shall have reached the vast mineral region of the treeless interior of the continent, these inexhaustible forests will support a large population of men engaged in felling trees and manufacturing lumber. Of timber lands and valleys among the hills of the timber region, there remain unsold lands—to which the Company is entitled—amounting to at least five hundred thousand acres.

### Dairy Lands of the Mountains.

Among the higher ranges of the mountains are extensive and numerous valleys that produce nutritious and luxuriant grasses, which are extensively grazed by large and numerous herds of cattle and sheep during the Summer and Autumn months. The amount of butter and cheese that is sent to market from these valleys is yearly increasing. The quantity of butter made in this State in 1866, was 4,449,835 pounds, and of cheese, 2,110,058 pounds, not nearly sufficient to supply the demand; and as yet large quantities are imported.

### Mines and Quarries.

The railroad passes through the entire length of Placer county, one of the principal gold mining counties of California. Lands containing gold and silver are not included in the grant to the Company. All the lands in the mineral region are not what are denominated mineral lands. The mineral lands are a very small proportion of the area, even in the strictly mineral regions. Lands containing coal and iron are not deemed mineral lands. Near the line of the road are extensive beds of iron ore, said to be valuable, but none of which have yet been worked. The granite quarries near the road are numerous, and those that have been opened give employment to a large number of men. Nearly all the granite now being used in the State, including that used by the Government for fortifications, by the State for its Capitol, and for the bulkhead in the harbor of San Francisco, as well as for street and building purposes, is from quarries on lands purchased from the Company.

Lands belonging to the Company containing limestone, with an abundance of oak and pine wood on the same, are to be found at various points near the line of the road, within a distance of forty miles from Sacramento. Many of these quarries have been opened, and large quantities of lime are transported by the railroad to Sacramento, and from this point distributed over the State. White and variegated marble, for building and ornamental purposes, have been discovered at several

points, and work has been commenced in opening the quarries and forwarding the product to market.

### Grazing and "Bottom" Lands in Nevada.

The railroad passes through the whole length of the valley of the Humboldt, in the State of Nevada. On the banks of the Humboldt river, and on the banks of the streams that flow into this river, are extensive tracts of bottom land that are being successfully cultivated. The hills in this section of the country are covered with bunch grass and other grasses, which support large herds of cattle and sheep, and within the past year the San Francisco market has been largely supplied with beef fattened on the natural grasses of these hills. Settlement has but commenced on these lands, and the company has at least one million acres of them yet unsold.

### Estimated Population the Lands will Support.

From what has been stated, it will be seen that the Railroad Company has every variety of land for sale, including alluvial, bottom, prairie, grazing, wheat and vineyard lands, as well as lands covered with forests of oak and pine, and containing iron ore, granite, limestone and marble. It has been estimated that the lands of the Company, remaining unsold, will support a population of one and a half million of persons, while the estimated present population within the limits of the railroad reservation does not exceed 30,000.

### Markets.

There yet remain large quantities of land to be sold, within distances from two to ten miles from railroad stations. There are also many towns and villages at various points within the reservation, and at various distances from the line of the road, so that a purchaser has no difficulty in finding land in the immediate vicinity of schools, stores, blacksmith and wagon shops. The farmer cultivating these lands has a choice among three markets in which to dispose of his productions. He can send them to the cities or towns in his immediate neighborhood; to the gold mining regions of California, or to the silver bearing regions of Nevada. Wheat, barley, and various other crops, can always be sold on the land where produced to the agents of millmen and shippers who traverse the country for the purpose of making purchases.

### Stations on the Constructed Line of the Road.

The following table shows the various stations on the line of the road in California, at which the cars stop and discharge and receive passengers and freight, as also the distance of these stations from Sacramento, and their elevation above the sea:



NAMES OF STATIONS.	Distance from point to point in miles.	Total distance from Sacramento.	Elevation in feet.
Sacramento.....	.....	.....	54
Arcade.....	7	7	76
Antelope.....	8	15	180
Junction.....	3	18	189
Rocklin.....	4	22	269
Pino.....	3	25	420
Penryn.....	3	28	735
Newcastle.....	3	31	930
Auburn.....	5	36	1385
Clipper Gap.....	7	43	1785
New England Mills.....	6	49	2306
Colfax.....	5	54	2448
Secret Town.....	8	62	2985
Gold Run.....	3	65	3245
Dutch Flat.....	2	67	3425
Alta.....	2	69	3625
Shady Run.....	4	73	4175
Blue Canon.....	5	78	4725
Emigrant Gap.....	6	84	5285
Crystal Lake.....	6	90	5780
Cisco.....	2	92	5950
Summit.....	13	105	7042
Truckee.....	14	119	5866
Boca.....	9	128	5560
Verdi.....	15	143	5000
Hunter's (Nevada).....	7	150	4640

### Schools—Education.

Every sixteenth and thirty-sixth section of land, or one-eighteenth of all the land in the State, was given by Congress to the State to be sold and the proceeds applied to the support of public schools. In addition to this, Congress gave to California five hundred thousand acres of land for purposes of internal improvement; the proceeds of the sales of these lands are also devoted by the State Constitution to public education. The interest on the money derived from the sales of these lands, as also an annual tax levied on all property, are annually distributed to all the school districts in the State. Whenever, in a neighborhood, a sufficient number of children can be gathered to form a school, it becomes entitled to support at the public expense. The public free schools of California are the pride of its people, and are not excelled by those of any of the new States. No child need lack an education because of the poverty of its parents; the State provides free education, and establishes schools

in every neighborhood. Every increase of population but adds to the demand for the State's land, and thus increases the fund to be applied to the support of public schools.

### Climate.

Our climate is similar to that of Spain, Italy and the south of Europe. The greater part of California is within the limits of the influence of the trade winds. There is no rain in Summer, from May until November. The period from November till May is called the rainy season, for in the great valleys and the lower hills at the base of the Sierras this season cannot be called Winter. In the valleys the average annual fall of rain is twenty-five inches; this gradually increases as the slopes of the mountains are ascended, to sixty inches. During the twenty years the Sacramento valley has been inhabited by Americans, snow has covered the ground but twice, and this had disappeared by the noon of the day on which it fell. The rainless Summers give every facility to the farmer in gathering his crops; the hay is cut and left to cure on the ground as it fell from the mowing machine; the wheat or barley is cut and permitted to remain for days or weeks before it is gathered and threshed, with the certainty that there will be no rain to injure it. Plowing and the sowing of grain commence with the first rains, in November or December, and by the first week in June the crop is ripe. Grapes ripen, the earlier kinds in July, the latest by the last week in October. In the valleys the heat of the midsummer sun is oppressive at noon, but the mornings, evenings and nights are cool and bracing. There are no prevalent diseases. In some of the low lands, overflowed by the rivers, and in places where the reservoirs for the supply of water to the miners are constantly emptied and refilled, exposing the bottom to the sun, there are, in the Autumn, some forms of miasmatic disease. The prairie lands, the rolling lands and hills, as well as the mountains, and valleys among the mountains, are free from any peculiar disease, and their climate is considered conducive to health, especially to persons of weak lungs.

### Counties in which the Company Owns Lands---Agricultural Productions.

The Railroad Company has lands for sale lying in the counties of Sacramento, Placer, El Dorado, Sutter and Nevada, of California, and in many counties in the State of Nevada. Of these five counties in California, where large quantities of land have already been sold by the Company, the clearest exhibit of their soil and climate, and of their varied agricultural productions, will be made by the following statistics, taken from the sworn returns of the Assessors of these counties to the Surveyor General of the State for the year 1866. In these counties there were in that year 545,516 acres of land enclosed, and of these 204,-

254 acres were cultivated. There were produced 547,941 bushels of wheat; 1,272,236 bushels of barley; 26,471 bushels of oats; 3,686 bushels of rye; 58,211 bushels of Indian corn; 1,991 bushels of buckwheat; 39,630 pounds of peanuts; 5,566 bushels of beans; 28,000 bushels of castor oil beans; 49,071 bushels of potatoes; 73,258 bushels of sweet potatoes; 251 tons of turnips; 2,155 tons of squashes and pumpkins; 1,248 acres of broom corn; 304 bushels of onions; 40,020 pounds of hops; 215 tons of beets; 56,617 tons of hay; 605,881 pounds of butter; 39,667 pounds of cheese; 58,390 pounds of honey, and 404,588 pounds of wool.

For the same year, there were also returned, as owned in these counties, 22,300 horses; 3,903 mules; 13,495 cows; 7,416 calves; 8,834 beef cattle; 2,219 oxen; 79,125 sheep; 39,225 hogs; 127,425 domestic fowls, and 3,426 hives of bees.

At the same time there were cultivated in orchards 297,121 apple trees; 206,407 peach trees; 82,812 pear trees; 23,633 plum trees; 7,012 cherry trees; 7,995 nectarine trees; 6,352 quince trees; 4,650 apricot trees; 6,631 fig trees; 169 lemon trees; 159 orange trees; 37 olive trees; 269 prune trees; 2,338 mulberry trees; 2,558 almond trees; 2,236 walnut trees; 135,574 raspberry and gooseberry bushes, and 680,502 strawberry vines.

There were also planted in vineyard 4,077,118 grape vines, which produced 363,593 gallons of wine, and 15,471 gallons of brandy.

The same returns show that during the same year in these counties there were six steam grist mills with twenty-one run of stone, and four water power grist mills with six run of stone, and that they ground 844,471 barrels of flour and 165,700 bushels of Indian corn. There were also at the same time forty-eight water power and twenty-two steam power saw mills for sawing lumber. The production of these mills for that year was 22,017,000 feet of lumber, and 7,718,000 shingles.

The official returns for the following year were largely in increase on almost every article produced, in consequence of the increase of population by immigration, and the greater breadth of land cultivated.

### How Lands are Sold.

The price fixed by the Company for the best class of agricultural, wheat, orchard, dairy and vineyard lands is \$2 50 per acre, oak wood land \$5 00 per acre, and first-class pine timber land \$10 00 per acre. With a desire on the part of the Company to dispose of its lands to men who will cultivate the soil, it sells its agricultural lands on a credit of five years if desired, the purchaser paying at the time of the purchase twenty per cent. of the principal, and the remainder bearing interest at

ten per cent. per annum, that being the rate of interest established by law in California. Oak and pine lands are required to be paid for at the time of purchase. At the Land Office of the Company in Sacramento are maps showing the route of the road, the counties through which it passes, the rivers and streams that flow through the land, and the United States surveys designating the lands granted to the Company and those retained by the Government; also the towns, villages and settlements within the railroad grant. A person desiring to purchase is directed to points near the line of the road, where he can examine the kind of land desired. After selecting the land, if he wishes to pay for it in full at the time of purchase he does so, and takes a fee simple deed under the United States patent. A purchaser from the Company can buy any quantity of land, or as many sections as he may desire, but, as has been explained, each odd section being surrounded by four even numbered sections, which are retained by Government for settlers, no compact body of land can be sold of greater extent than one section of 640 acres. Supposing the purchaser desires to purchase a quarter section—a tract of half a mile square, containing 160 acres—and that he wishes this land on the credit allowed by the Company; 160 acres at \$2 50 per acre would be \$400; twenty per cent. of \$400 is \$80; he would pay this \$80 to the Company, leaving \$320 due; on this he would pay interest at ten per cent., or \$32 per year, for five years, payable yearly in advance. At the time of making the payment of \$80 and the first year's interest, he would receive a contract for a deed from the Company, signed in duplicate by him and the officers of the Company, in which he would agree to pay the yearly interest and the balance due at the end of five years, and the Company agreeing on its part to give him a fee simple deed when the balance was paid. At any time the purchaser desires he is allowed to pay the balance due and take his deed, thus stopping the payment of interest; the Company will not, however, receive it in installments. Practically but few persons avail themselves of the five years' credit, although purchases are frequently made on credit, yet in most instances by the second or third year they are enabled, from the sale of their crops, to pay the balance due and receive their final deeds.

#### Advantages to the Purchaser of Railroad Lands.

The purchasers of railroad lands have many advantages over those purchasing from the Government, some of which can be best explained by stating the mode in which the Government disposes of its public lands—the even numbered sections—within the railroad reservation. A person, to acquire title from the Government by pre-emption, must first go upon the land, commence its cultivation and erect a dwelling house; he then files in the United States Land Office his “declaratory statement;”



that is, a document setting forth that he has selected a certain piece of land, describing it, together with the date of his settlement, the fact that he is a citizen or has legally declared his intention to become a citizen, his age, etc. After three months he must appear at the United States Land Office, with two witnesses, where a trial is had and proof made on oath before the Land Officers that he has complied with all the provisions of the pre-emption law. If the law has been complied with he then pays \$2 50 per acre and a receipt is given him; in a year or two a patent is received and he returns his receipt and obtains the patent for his land. No man can obtain from the Government, by pre-emption, more than 160 acres of land, and having received this his privilege is exhausted.

There is one other way by which a person can obtain lands from the Government—on even numbered sections within the railroad reservation—and that is by filing a homestead claim on eighty acres. As in the case of pre-emption, he must erect a dwelling, live on and cultivate the land; he must then file in the United States Land Office his declaration of homestead, setting forth substantially the same facts as in the case of pre-emption. On the day he files, he receives a homestead certificate. If he continue to live on the land and cultivates it for five years, from the day of filing, he can, after that time, make proof of the facts as in the case of pre-emption, and if the law has been complied with, he returns his certificate, and in time will receive a patent without other expense, except the fees of the officers and the fees of an attorney, if necessary that one should be employed. A pre-emption cannot be for more than 160 acres, nor a homestead for more than 80 acres on Government land within the railroad reservation. Neither the pre-emption nor homestead can be abandoned, sold, mortgaged or leased until after the patent is issued. On the other hand, the purchaser from the railroad is not limited as to quantity, and when the money is paid and the deed issued, he can do as he pleases with the land—it is his in fee simple. There are no complicated laws or rules—he selects his land, pays for it, and takes a deed, or buys on credit, and takes a contract for a deed, which is assignable. In either case he does with the land as he deems proper—he may sell, lease, reside on the land, or reside elsewhere, or he may let it remain to increase in value, by the settlement of the country about it. Many purchasers of railroad lands do not build upon the land purchased, but erect their dwellings upon the adjoining even sections, thus taking advantage of the privilege granted by Government, and obtaining in one body, a larger tract than could otherwise be obtained.

#### Policy of the Company in the Sale of its Lands.

The policy of the Company is and has always been, to sell its lands at low prices, and upon easy terms of payment. Its Directors believe



its best interests are promoted by selling its lands near the line of the road to men who will personally cultivate the soil, and who will own the land they cultivate. During the coming three years, the Railroad Company will be at work completing its road. It will employ all the labor that may be offered. It pays to laborers thirty dollars per month in gold, and provides them with board—to mechanics proportionally greater prices. Thus, any man coming to California, who can labor, may be certain of employment, and if he so desires, he can, with the proceeds of seven months' labor, become the owner of eighty acres of the finest wheat land in the world, in a climate that for salubrity has no equal; in a State where all children are educated in free schools at the public expense, and where slavery never had existence, among a people who honor labor, and whose laws give ample protection to life and property.

All communications in relation to the lands of the Company, if addressed to B. B. Redding, Land Agent, Central Pacific Railroad Company, Sacramento, Cal., will be promptly answered.

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## Lands of the California and Oregon Railroad.

The California and Oregon Railroad Company has a grant of lands from the United States, consisting of all vacant odd numbered sections within twenty miles on each side of its road, and where the odd numbered sections have been taken up by pre-emption or otherwise, the Company has the right to select other vacant odd numbered sections as indemnity, within thirty miles on each side of its line. This road commences at Roseville, in Placer county, California, on the line of the Central Pacific Road, and extends north by way of Marysville, in Yuba county, through Chico, in Butte county, to Red Bluff, in Tehama county, and so on north through Shasta and Siskiyou counties to the State of Oregon. This road is now completed to Chico, and is being rapidly extended.

The route of this road is nearly parallel to the general course of the Sacramento river, and its grant embraces some of the finest bottom lands of the Sacramento Valley. The Directors have not as yet determined upon the prices and authorized the sale of its lands, but will probably do so

within a few months. This Company will pursue the liberal policy to settlers in the sale of its lands that has been followed by the Central Pacific Railroad.

Its Land Agent is B. B. Redding, Sacramento.

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## Lands of the Southern Pacific Railroad.

The route of this road extends from San Jose, in Santa Clara county, south by the town of Gilroy, and through one of the passes of the Diablo range of mountains to the San Joaquin and Tulare valleys, and through these valleys to San Bernardino county, and so on east to the Territory of Arizona.

Its grant of lands is similar in terms to that of the California and Oregon Railroad. This road has been completed to Gilroy. Its further construction into the San Joaquin and Tulare valleys will open to cultivation vast tracts of the most fertile lands, the productions of which cannot now be profitably transported to market. The Company has not as yet appointed a Land Agent. Its President is Lloyd Tevis, San Francisco.

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## To the Reader.

When you have read this pamphlet, preserve it and lend it to your neighbors or send it to some friend in the Eastern States or elsewhere, who will value the information it contains and might be likely to come himself or send intelligent, industrious farmers to settle in California. Other copies of this, and similar information for the same use, may be obtained gratis of the CALIFORNIA IMMIGRANT UNION, No. 316 California street, San Francisco, or will be directed and mailed to suitable persons in the Eastern States, Great Britain, or her colonies and provinces, on request, and letters requesting information will be answered promptly. A German edition is also published for the same purpose, and translations in other languages will be issued.

# ADDRESS

DELIVERED BY

*Henry H. Haight*  
H. H. HAIGHT, GOVERNOR OF CALIFORNIA,

At Sacramento, May 8th, 1869, upon the Completion of the Pacific Railroad.

FELLOW CITIZENS:—We meet to-day to celebrate one of the most remarkable events of this eventful age, one whose influence upon the future of our country and upon human destiny it would be difficult properly to measure; one of the greatest triumphs of American enterprise, engineering and constructive skill and energy of which our history can boast. It ushers in a new era in American progress, and while it is an event of world wide significance, it is one of special importance to our own country and our own State.

I would that its great results to California could be set forth on this day of rejoicing by eloquence more worthy of the theme than any poor efforts of mine; but in consenting to accept the invitation with which you have honored me, to be your speaker on this occasion, I have rather yielded to the necessities of official position than assumed a task to which I felt adequate.

## A REVIEW.

I recollect some years ago looking at a picture which many of you doubtless have seen, representing a family of pioneers who had accomplished the tedious journey overland, and, having reached the crest of the Sierras, stood gazing with enraptured vision upon the magnificent panorama which extended before their eyes in the valley of the Sacramento. The noble river in the distance seemed like a silver thread meandering through the great valley; the purple summits of the Coast Range rose in front to the westward, and far to the south stretched the fertile plains of the San Joaquin, until, in the soft haze of our landscapes their limit was lost in the horizon.

In a metaphorical sense, we stand upon such an eminence to-day. Behind us is the

rugged journey, with its desert sands, its savage tribes, its cooling springs, making oases where at times we have rested from our toil; around us is the pure air and over us the blue sky, while within us our hearts beat high with hope and confidence, and before us lies in its beauty the rich prospect of our boundless future.

In looking back over our journey, did time permit, one would be tempted to extend the review beyond our own personal experience, and the history of our State and country to note a few of the most memorable epochs which have marked human progress during the eighteen centuries that are past. To trace the history of civilization, however, during this period would require far more than the time now allotted, and is a subject which would task the loftiest powers. Otherwise, it might be interesting to dwell upon those prominent epochs which have signalized the progress of mankind since the advent of Christianity marked an advance from paganism to theism, and from a religion of forms to one of spirit; from the time when the code of Justinian marked a memorable era in legislation to the period when Magna Charta developed a new and rational theory of government, and thence to the enlightenment of the present day. This progress, it is true, has not been uniform or constant. The tide has had its ebb as well as its flood. There have been temporary retrogressions in almost every department of human activity—in science, in government and in religion.

Nations have exchanged places in the scale; some have relinquished freedom for despotic rule, religious liberty for blind superstition, power for weakness, and science for ignorance, while other nations have risen from barbarism to the heights of knowledge, and



from small beginnings have attained greatness in the arts and sciences, in freedom, wealth and power.

The great nations of the present day are none of them ten centuries old. England's greatness dates from the revolution of 1640, before modern civilization had penetrated the domain of the Czar, before the Prussian monarchy or the American republic were known among the nations—when Spain was the leading power on land, and Holland was mistress of the seas.

Human progress for the last two centuries has known little pause. Dynasties have risen and fallen; revolutions and civil wars have deluged portions of the world with blood; but, heretofore good has been evolved out of evil, and, during war and peace, political changes and national vicissitudes, the minds of men have been year by year more emancipated from thralldom, and more active in investigation, and in useful invention and discovery.

In the history of human progress it seems to us as if the chapter devoted to the present century would fill as large a space as the eighteen centuries which have preceded it. It is now but little more than two-thirds gone, and yet what improvements and discoveries it has witnessed. When the last century closed, and for some years afterwards, no steamboat had been built.\* Nearly a fourth of the present century had passed before railway construction was inaugurated, and nearly half of it was gone before electricity was pressed into man's service, as his messenger to annihilate distance and bring into instant intercourse the most remote islands and continents.

Anthracite coal was never used as fuel in dwellings, nor was any city lighted with coal gas until after the year 1800.

Time would fail to enumerate even the most important discoveries and inventions of this century. In locomotion, in the art of printing, in weaving and sewing by machinery; in dyeing and coloring; in hydraulics and optics; in the application to machinery of steam and hot air; in the thousand improvements in firearms; in light, lighthouses and lightning; in photography, from the daguerrotype to the card photograph; in agricultural implements, in cabinet work and house building, in steam navigation, in ship building, in railways and electro-magnetic telegraphs, with their various apparatus of wire and cable, and printing; in housewarming; in lighting streets and dwellings; in metal pipes and tubing; in sewerage and drainage; in cotton, wool, flax, hemp and silk production and manufacture; in all these and many other channels the minds of men have been busy and fruitful during the sixty-nine years of the present century, until the limit of invention seems to be almost reached and human ingenuity exhausted.

#### DISCOVERY OF GOLD AND ITS EFFECTS.

Marshall's discovery of the particles of gold in the mill-race at Coloma was the be-

ginning of a great revolution in the commerce and business of the world, and in the nominal value of labor and property. It changed our geography and gave a new expansion to American ideas. What had before seemed hyperbole, became reality; the empty boasts of stump orators seemed about to be verified by facts. The treaty of Guadalupe Hidalgo had secured as in possession of the fairest, the most genial and fruitful part of the American continent, and as we, in our partial judgment think, of the globe. We had almost realized the poet's dream of exchanging our "pent up Utica" for "the whole boundless continent." We still lacked the British possessions and Mexico, but we were in the position of one gorged with food and incapacitated from further indulgence, until time was allowed for digestion and assimilation. I speak of a revolution in the commerce and business of the world, and in the value of labor and property. Two substances alone, gold and silver, are an accepted standard of value and a universal medium of exchange. Like all other articles, the intrinsic value of these metals is regulated by the quantity produced, the cost of production, and the demand for their use. The demand has increased with the expansion of commerce, but its increase bears no ratio to the increased supply. The whole amount of gold and silver in the old world at the discovery of America was estimated to be \$170,000,000, and the total annual product of gold in the world for some years previous to 1848, was but \$20,000,000. At this rate it would have required a century to produce \$2,000,000,000. Within the past twenty years there have been added to the stock of precious metals more than this latter sum.

The obvious result would be, as it has been, to diminish the exchangeable value of gold and silver, so that to procure many of the necessities and comforts of life requires about three times as much money as it did twenty years ago.

This, however, is not the time to weary you with statistics, or discuss questions of political economy. The Oregon and Mexican treaties gave us a new geography; but neither Oregon, with its majestic river, its productive soil and its "continuous woods," nor California, with its healthful and equable climate, was accessible to immigration by any except the roving trapper and frontiersman. Trackless deserts infested by tribes of Indians, and lofty mountain ranges intervened between the States of the Union and the newly acquired territory along the Pacific.

#### THE PAST OF CALIFORNIA.

The thirst for gold in 1849 and the few following years stimulated a multitude to defy all dangers and difficulties in the effort to reach the new El Dorado. An almost continuous line of emigrants crossed the Plains and reached the Pacific, way-worn with travel and decimated by famine, pestilence and massacre. Another army crowded steamers and sailing vessels for the Isthmus of Pana-

\*NOTE—Except Fitch's unsuccessful experiment.



ma, and encountered the miasma of the tropics and the discomforts of a voyage in over-crowded and ill supplied vessels. Thus, by sea and land, the stream of adventurers poured into the region of gold. Europe added its contribution, and the penal colonies of Great Britain also—some of which latter was of indifferent quality.

So they came in 1849 and 1850, a vast throng, mostly men in the prime of life, full of adventurous energy—the elite of the enterprise of older countries, carrying with them, in spite of some vicious and dangerous elements, a large infusion of Anglo-Saxon respect for law, order and constituted authority.

The track of emigration across the Plains was dotted with the graves of those who fell by the way, and in the lack of ordinary comforts multitudes more would have soon found a grave in California but for the salubrity of its climate.

The early emigration was composed of heterogeneous elements. All forms of vice and dissipation were indulged unblushingly by men and women set loose from the restraints of settled society, and freed from the control of a sound public sentiment. There were many noble spirits who labored to lay broad and deep the foundations of religious, educational and charitable institutions, and to organize republican government on these shores. Some of them have rested from their labors, leaving behind them monuments more enduring than marble, and some of them are still pursuing their career of usefulness among us.

In looking back at the past, how checkered is the prospect! Conflagrations have swept our cities and towns with the besom of destruction. The commercial metropolis of the State has more than once been almost wholly destroyed by fire, with no insurance to repair the broken fortunes of its citizens, and the present Capital has suffered not only from fire, but from the more appalling disasters of flood. Mercantile embarrassments and disaster, with extreme depreciation of property, were superadded to the ruin wrought by flood and fire.

There are shadows in the picture like all of this world's experience; but in disaster and distress, Saxon and Celtic energy vindicated its claim to supremacy over all the obstacles of accident and of nature. The Winter of discontent has been exchanged for glorious Summer, and a stable edifice of prosperity has been reared upon the ruins of our shattered fortunes. No more invincible perseverance has ever been manifested by any community under disheartening circumstances than by that of Sacramento, and her citizens are at last sharing with those of other cities a prosperity beyond that of any former period, and rejoicing in the certainty of a bright future.

For the first years of our California experience, those of us who were here felt many longings for the old homes and friends we had left beyond the mountains; an intense desire for some rapid and direct communication with the Eastern States, pervaded the

mass of the population. It was never absent from our thoughts by day, or from our dreams by night. The lack of it induced many to bid a reluctant farewell to the sunny skies and attractive scenes of California, and seek their former homes east of the mountains.

Our only communication with the East in those days was the *Patama* steamer, first occasional, then monthly. The journey overland consumed months, and a telegraph or railway during the present generation was looked upon as chimerical. Installments of news came once a month in the shape of letters, and Eastern papers forty days old, which were eagerly purchased at fabulous prices.

In the Winter of 1849-50 the streets of San Francisco were thronged with miners driven there for shelter from the inclemency of the season. The prevailing style of dress was a flannel shirt in lieu of a coat, and in addition to the ordinary nether garments a pair of long boots purchased at the moderate price of six ounces or ninety-six dollars in gold dust. Most of the large rooms in the city were used as gambling saloons, with the accessories of bands of music and well-stocked bars. Here day after day were to be seen dense crowds of men of all nationalities and races bending in absorbed attention over the gaming table, ignoring all distinctions of race or color in the excitement of play. Comparatively few were without weapons, and yet the number of homicides was relatively small. The sight of a lady was sufficiently rare to cause a street full of men to stop and turn to look at one passing.

The advent of Spring dispersed the crowds of miners throughout the mountains, and produced a stagnation for the time in San Francisco. I must not weary your patience by dwelling upon the scenes of the past so familiar in memory to many of you. Suffice it to say, the public gaming-house was soon succeeded by the school-house, the hospital, and the sanctuary. The common law and a code of well considered statutes superseded the vague, uncertain and strange rules of Mexican and civil law, and Courts organized in accordance with American usages took the place of the unfamiliar and irregular judicial administration of Courts of first instance.

One thing must be said of our people, and it is but justice to say it; no more liberal, even lavish charities ever characterized any people than those of this State. The direction then given to benevolent impulses will never cease to be felt. It has conferred lasting honor upon our State and reflected credit upon human nature. It was the offspring of circumstances. Men came here strangers, without families and homes. There was a present feeling of mutual dependence. Wealth too, was easily acquired, and as a consequence, lightly esteemed. Open handed charity was the custom, and the people were educated to give at any time to any worthy object. Hence the benefactions with which California has been prolific, and which are known to the world, and hence the facility with which money can be obtained among us for any worthy or laudable purpose.

California in the early days was known to

possess mineral wealth, and this was thought to be her only attraction aside from climate. The general judgment was that the country was worthless for agriculture. The long drouth of Summer was thought to render profitable husbandry impossible. On approaching her shores we were told that the earth became so parched with drouth in the dry season that it was rent with fissures, which in some districts rendered journeying unsafe. Trees, it was thought, would perish in Summer from lack of moisture.

Such was California in the past, with neither schools, hospitals or churches, with few public journals, with no agriculture, no fire-sides or children, no settled public sentiment, no railways or telegraphs, no shipyards, wharves or docks, no public buildings, no manufactures, and no communication with the East except by three small steamships, the germ of our present steam marine.

The country, however, was here, with its cloudless sky and its healthful air, its fruitful soil, its noble harbor and bay, and its water courses opening access to the great inland valleys; and the pioneers were here, with faith in its future, with fixedness of purpose, with large hearts and stalwart arms.

This was our past—what is our present? But little more than twenty years have gone and what has been accomplished?

#### THE PRESENT.

Look around you, and see these philanthropic and benevolent institutions which now constitute your highest praise. Sanctuaries representing every form of religious belief—Gentile and Hebrew—Protestant and Catholic. A public school system, well organized and endowed, growing every year in efficiency, placing instruction within reach of all. A University, furnished with ample means for growth, in addition to private institutions of learning. Hospitals, private and public. Asylums for the insane, for the deaf, dumb and blind, and for the orphan. Benevolent associations to relieve the wants of the distressed and suffering, of every creed and nationality. A public press, which for enterprise and devotion to the public interests, is certainly not inferior to that of any Eastern State. Thousands of comfortable homes, in the best sense of the word, with troops of rosy-cheeked children. A sound and discriminating public sentiment. A system of interior railways, well advanced toward completion, which will soon render the most distant parts of the State accessible. Spacious and elegant ferry and river steamers. A well organized citizen soldiery, as a reliance against attack without or lawlessness within. Telegraphic communication between the commercial center and every considerable town in this State and the States north and east. Ship-yards and dry-docks, foundries and factories—lines of steamships, north, west and south—public buildings for the criminal and the unfortunate. A State Capitol, nearly completed, which for solidity, spaciousness and architectural elegance has few equals on the continent. These are but a part of our present. To present a complete statement

within the short compass of an address would be impossible; but there are two things more to be noticed. Agriculture, not mining, is now the basis of our prosperity, the sinews of our commerce, and the source of our wealth. The fame of our gold is eclipsed by that of our wheat. Agriculture is daily becoming a greater interest, and gold mining relatively, if not absolutely, less. Breadstuffs, wool, wine and silk seem now developing into the great industries of our State, but our agriculture will naturally be diversified and profitable beyond what would be possible elsewhere, owing to the peculiarities of our climate.

#### THE GREAT WORK COMPLETED.

The other feature of our present is the great Continental Railroad, the completion of which we are met to celebrate to-day. If any one had asserted six years ago that to-day would find us rejoicing over a completed Pacific Railway, he would have been ridiculed as an idle dreamer. It is due to truth and candor to say, that even after the large grants made by Congress, the number of those who regarded the enterprise as spurious, and as nothing more than a Dutch Flat turnpike, probably exceeded the number of those who expected to witness its completion. It is unnecessary to give a history of a work with which you are all so familiar. Many of you recollect that not far from this place, in the month of January, 1863, the first ground was broken in the construction of the Pacific Railroad, by the then Governor of the State, now the President of the corporation. The enterprise encountered some opposition, which has probably retarded by a twelvemonth the completion of the work. I am not here to sound the praises of individuals or of communities, but it is simple justice to say that the men who projected and successfully executed this gigantic undertaking have exhibited a degree of foresight, of industry, sagacity and business capability which merits high praise.

I say this the more freely because it is well known that I have never looked with approbation upon the loan of State funds or credit, or the gift of State property to any corporation of this character. The people doubtless will oppose any such policy in the future, as they have in the past.

It is a question of low taxes and exemption from debt on one hand and a burdensome debt and high taxation on the other. All the railroads which are required will be built by private enterprise, without loading the State with an incubus of debt, crippling its finances for half a century, and furnishing a prolific source of corruption. If we expect to derive benefit from a Pacific Railroad by the influx of population, we should be able to point immigrants to a State free from debt, where the surplus earnings of the industrial and mercantile classes are not all absorbed by the tax-gatherer.

While, too, we should be willing to be just to all, we need not forget that most powerful private corporations have some interests in conflict with those of the public, and that they are justly regarded with some jealousy.



To return, however, from this digression; It cannot be otherwise than a source of just pride to the citizens of Sacramento that whatever credit attaches to any community in the State for the conception and execution of this great enterprise belongs rightfully to them. I say this not to utter any implied censure upon other communities on this day of festivity and rejoicing, but it is said as the simple truth. The men who conceived the project and carried it through to success are all citizens of Sacramento, and the fact cannot be otherwise than gratifying to its people.

It was an arduous undertaking from first to last. The progress, at the outset, was slow through the foot-hills and up the mountain slopes of the Sierras. Hills were cut through and cañons bridged, until after about four years of labor the iron track reached the solid granite of the summit. A tunnel of 1,650 feet, through granite rock, involved enormous expense and labor, and caused a delay of a year. The mountain was finally pierced, and the iron track started but little more than a twelvemonth ago for its race toward the Rocky Mountains. That the rapidity of its construction since that time has been a marvel, and that all anticipations have been exceeded, is notorious.

We stand here to-day to rejoice not only over the completion of this great thoroughfare of commerce, but to rejoice still more with devout thanksgiving over a prosperity not exceeded, if equaled, in any community on the globe. It is safe to say that there is no State or country where more elements of substantial prosperity exist, where greater contentment prevails, where labor is so well rewarded, where wealth is so generally diffused, where a sounder currency is to be found, and where climate and other causes are more promotive of health and happiness of all classes.

#### THE FUTURE.

I have thus, in these di-cursive remarks, glanced briefly at the past and present of California. What shall be said of its future? Lift your eyes and expand your conceptions to take in the magnitude of its destiny. An empire in area, presenting advantages and attractions to the people of the Eastern States and Europe far beyond those presented by any other State or Territory, who will set limits to its progress, or paint in fitting colors the splendor of its future?

When we reflect upon what has transpired during the twenty years that are past, isolated as the State has been, what will be its progress during the twenty years that are to come? Extrinsic causes, of course, may influence our destiny for good or evil. Mismanagement at home or at Washington, prodigate public expenditure, foreign war, and unwise legislation, famine and pestilence may, at times, retard our progress, but if the people of California are true to themselves, this State is destined to a high position, not only among her sister States, but among the commonwealths of the world.

What is to be her future in the useful arts with the popular intellect trained and devel-

oped by a complete system of general education; in the fine arts, when the exquisite tints of her landscapes and sky, and the stupendous scenery of her mountains are transferred in glowing colors to the canvas, and the sculptor's genius chisels into forms of beauty the marble of her quarries; in commerce, when trade is freed from its shackles; when her ships visit every shore, and her merchant princes control the commerce of this great ocean and the populous countries upon its border; in manufactures, when our silk and woolen goods, by their superior quality, displace the fabrics of older nations; in agriculture, when our wine and wheat are as eagerly sought after as our gold and silver; in science and literature, when institutions of learning of the first order afford every facility, and accumulated wealth secures leisure for scientific and literary pursuits?

In answer to these questions, we might be charged by our Eastern brethren with blind partiality and exaggeration. We are content to leave the answer to time.

The day is at hand when a more splendid civilization than any which has preceded it will arise upon these distant shores. A vast population will pour into this Canaan of the New World. Already we hear the hum of preparation in every quarter. Already we listen to the tread of the advancing hosts. From the North, East and South, from the Lakes to the Gulf, the swelling current of population will gather volume and pour in a mighty tide across the continent, bringing to us the youth, the enterprise and energy of the older countries in search of adventure, of freedom and of riches on the shores of the Pacific. Tourists will be attracted by the most sublime scenery on the continent, and thousands will come to repair physical constitutions racked by the extremes of climate, the inclement air, and the miasma of the States east of the mountains.

#### A REMINISCENCE.

These words may seem boastful to our brethren at the East, but we know whereof we speak, and in simple truthfulness can say no less. One reminiscence more before I close. The 14th of this month terminates the first century of the occupancy of this State by the white race. One hundred years ago, on that day, the first settlement of white men was made within the borders of California. A party of immigrants then arrived, not in a luxurious passenger-car, whirled along the dizzy heights and profound gulfs of the Sierras by a ponderous engine, waking the echoes of the mountains with its roar and rattle, but led by a Franciscan friar, not in quest of gold or office, or of a more comfortable home, but stimulated by religious zeal and bearing the standard of the Cross. After a laborious and painful journey overland through Mexico, Father Juan Crespi arrived at San Diego on the 14th of May, 1769, one hundred years ago. Father Junipero followed, arriving on the 1st of July of the same year.

It seems singularly appropriate to signalize the centennial anniversary of the settlement of California, by the completion of this crown-

ing work of Saxon civilization, which links together in iron bonds the two great oceans of the world and carries California at one bound into the center of the great family of nations.

If after the lapse of this hundred years the good friar could awake from his slumber and revisit the scene of his self-denying labors, with what speechless amazement would he gaze upon the transformation wrought on these shores since his day. It is doubtful, however, whether the changes of the past hundred years, amazing as they have been, are more wonderful than those that will occur within the hundred years to come. Where is the fancy adventurous enough to conceive the changes to occur before the ceaseless course of time brings the second centennial anniversary of the settlement of California?

#### WORDS OF WARNING.

In conclusion, however, some things must be borne in mind, if we expect that prosperity which seems to gild with its rainbow of promise the horizon of our future.

Railways and telegraphs are potent civilizers, but these alone will not constitute or conserve any State—much less a free State. Corruption and vice can travel on railways with as much ease as in stage coaches. California may have all the facilities of travel and intercourse, and its people accumulate

wealth beyond the dreams of avarice, and yet be miserably poor in all the higher elements of solid and enduring happiness. What the moral character of the future population of this State is to be, depends largely upon the generation which is living to-day.

When we contemplate the magnitude of the destiny in store for our noble State, let us realize that we must ourselves furnish to those who are to come after us that lofty example which we wish them to follow. We must set our faces like a flint against corruption in high places as in low ones—in legislative halls and primary Conventions. We must make no compromise with gilded dishonesty. We must refuse to recognize two codes of morals, one for private and a lower one for political affairs.

Above all we must recollect that the only basis of morality is religion—that no people who are unmindful of their obligations to their Creator can permanently prosper. That no amount of material wealth can compensate for the decay of public and private virtue; and whatever our religious convictions may be, or whatever forms of worship or tenets of faith our judgments approve, while we obey the calls of patriotism and render unto Cæsar the things that are Cæsar's, let us be careful to render unto God the things that are God's.



*California. Legislature. Assembly. Committee on  
Corporations.*

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NINETEENTH SESSION OF THE LEGISLATURE OF THE STATE OF CALIFORNIA

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# REPORT

OF THE

## COMMITTEE ON CORPORATIONS

OF THE ASSEMBLY,

UPON

### RAILROAD FREIGHTS AND FARES.

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GILES H. GRAY, Chairman; M. J. WRIGHT, ROBERT BELL, ASA ELLIS,  
H. M. HAYES, C. L. F. BROWN, W. R. WHEATON,  
J. B. RICE, W. C. CONNOLLY, Committee.

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T. A. SPRINGER.....STATE PRINTER.

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## REPORT OF COMMITTEE.

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NINETEENTH SESSION OF THE LEGISLATURE OF THE STATE OF CALIFORNIA.

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SACRAMENTO, February, 1872.

MR. SPEAKER: The Committee on Corporations from the Assembly, to whom was referred Assembly Bills Numbers Seven and Nine, each entitled—"An Act to amend an Act entitled an Act to provide for the incorporation of railroad companies and the management of the affairs thereof, and other matters relating thereto, approved May twentieth, eighteen hundred and sixty-one"—report that they have had the same under consideration, and have arrived at the conclusions which are hereinafter set forth.

The magnitude of the questions involved demanded of the committee a careful and thorough investigation, and demands of this House an attentive hearing before final action on the bills introduced.

Deciding the matter referred to them one upon which adverse opinions could be entertained, the committee first proceeded to ascertain if possible the complaints or injuries which the bills were designed to remedy, and afterward to call in and examine all available evidence tending to show the effect which the proposed bills would have upon railroad companies, and the facts and circumstances which should govern the committee in amending the bills offered, or in preparing a substitute which would do exact justice between the people of the State on the one hand and the railroad companies on the other. To that end the committee called before them the authors of the bills, and many witnesses who, from residence in different portions of the State, were supposed to be able to represent the people of the State and the wrongs, if any, suffered by them. The result of the evidence of this class of witnesses was that no cause of complaint existed against any railroad com-

pany of this State as to the rates of freights and fares now charged by it, and that the only and real object of the bills under consideration was not so much to change the present rates, as to fix them where they are, and thus to prevent a future increase. No extortion or oppression was proved. Some vague and unauthenticated complaints were made in regard to certain rates charged at way stations between Colfax and Truckee upon the Central Pacific Railroad, because, it was alleged, that such way rates were higher, in proportion to the through rates from Sacramento to the State line, than the residents of the locality desired to pay. With what justice this complaint is made will be seen hereafter.

The provisions of the bills offered were then examined and the explanations of the authors received, but although the committee patiently listened to all which the author could offer to justify the rates and regulations which were embodied in his bill, they became convinced that the same had been prepared without method, system, or rule. No evidence could be obtained to show that they were the result of any practical experience whatever, or that if fastened upon the railroads of this State by the force of law, it would not in effect be an oppression not only upon such railroads, but also upon the people of the State. The oppression upon the people would result from the operation of any law which compels the railroad, in order to secure necessary income, to fix rates equal for both directions, and upon all classes of freight, and upon all grades. Should such a law be adopted it would be prohibitory upon certain natural products of the earth, which are now in fact moved at less rates than are fixed by the proposed bills, because the companies can charge higher rates than those fixed by the bills upon certain freights which can afford it. The rule contained in the bill offered, which provides that loading and unloading should be at the cost of the company, was also found to be an objection to the bill, because prohibitory upon the business of freighting hay, granite, wood, and the like, which are invariably loaded at the outposts of the roads by the shippers, where the road have no stations, and by reason of the scarcity of business cannot keep men employed for such work.

The provision to allow rates to be charged by measurement in certain cases was not found to give the relief demanded by the companies from the oppressive features of the bills, because such a rule is impracticable with roads making connections with other roads out of this State on whom such a rule is not obligatory, and hence is disregarded.

Having thus ascertained the imperfections of the bills under consideration, the committee next proceeded to obtain, if possible, sufficient information to report a substitute for the bill, and a basis for some action by the House on the subject matter, and to this end have collated and



examined all railroad statistics, reports, laws, and regulations which they could obtain, and called before them such railroad experts, engineers, superintendents, and employes as they could find, and also procured extracts from the books of the Central Pacific Railroad Company, and a full list of its charges, and freight and passenger fare regulations.

The result of this investigation has been that in order to do even approximate justice to both the people and the railroad, a general law regulating freights and fares cannot be framed to apply to all the roads in this State; but if such matters must be regulated by law, then there should be a separate statute for each road, in which the classes of freight should be distinctly specified, and the rates upon each class and between each station should be distinctly and plainly set forth. A law of this kind for the Central Pacific Railroad would require a larger book than is the entire statutes of the last session of the Legislature of the State of California.

Therefore, the committee feel justified in the belief that it is impracticable for the Legislature to do more than enact a general rule governing railroads in the construction of their tariffs, and no rigid schedule of rates can be adopted which will do justice both to the carrier and shipper.

The evidence before the committee developed a multitude of facts and arguments to support this doctrine, of which we will now present to the House the most prominent; and first:

*Rigid tariffs are not the rule of the United States.*

The evidence comprehended much valuable information relating to the usages and laws of other States, and as the committee judged that experience is the best aid in testing the application of law to future operations, they have carefully sought a precedent for the action demanded by the bills under consideration. The average usage of other States of the United States must be admitted as evidence of the average sentiment and opinions of the American people upon this subject of arbitrary legislation on the finances of railroads, and as having at once a tendency to smooth down whatever asperities of opinion or judgment that might be existing in some few States in consequence of the conflicts between railroad management and shippers.

The following table will show the legal restrictions which different States have placed upon the free development of their railroad systems; and of the few that show any arbitrary legislation, the committee will exhibit the results of other evidence showing how unwise has been the attempt on the part of such States to do anything which would actually

restrict companies to obedience to a rigid rule, and thus oftentimes fix barriers between the real wants of the communities and the common carriers. The table, it will be observed, gives but the general results of the examinations of all of the laws of the United States, and the details, where necessary, will be shown afterwards.

No.	Name of State.	State of Restrictions.	No. miles of Railroad, 1871.
1	Maine .....	Nothing .....	786
2	New Hampshire.....	10 per cent to be assured companies.....	736
3	Vermont .....	10 per cent to be assured companies.....	614
4	Massachusetts .....	After 10 per cent assured may legislate.....	1,480
5	Rhode Island.....	After 12 per cent assured may legislate.....	136
6	Connecticut .....	Nothing but Commissioner reports.....	742
7	New Jersey .....	Special charters, with restrictions.....	1,125
8	New York.....	No restrictions except for New York Central.	3,928
9	Pennsylvania.....	Nothing .....	4,656
10	Delaware.....	Nothing .....	224
11	Maryland .....	Special charters, with restrictions.....	671
12	District of Columbia...	Nothing .....	671
13	Western Virginia.....	Nothing .....	387
14	Virginia .....	Nothing .....	1,485
15	North Carolina.....	Nothing .....	1,178
16	South Carolina .....	Nothing .....	1,139
17	Georgia .....	Nothing .....	1,845
18	Florida .....	Nothing .....	446
19	Alabama.....	Nothing .....	1,429
20	Mississippi.....	Nothing .....	990
21	Louisiana .....	Nothing .....	479
22	Texas .....	But one special charter, limited.....	711
23	Arkansas .....	Nothing .....	256
24	Tennessee .....	Simply reserves right to legislate.....	1,492
25	Kentucky .....	Special charters, no restrictions.....	1,017
26	Ohio.....	Restrict'd on dist. over 30 miles, 10 prct clause	3,538
27	Michigan.....	3 cents per passenger, nothing on freight.....	1,638
28	Indiana.....	Nothing .....	3,177
29	Illinois.....	Late constitutional restrictions.....	4,823
30	Wisconsin.....	Nothing .....	1,525
31	Minnesota.....	Restricted on distances over 30 miles.....	1,072
32	Iowa.....	Nothing .....	2,683
33	Nebraska .....	Nothing .....	588
34	Missouri .....	Arbitrary rates, but very liberal provisions...	2,000
35	Kansas .....	Arbitrary rates, and not liberal.....	1,501
36	California .....	Arbitrary rates, and not liberal.....	925
37	Nevada .....	Arbitrary rates, and not liberal.....	593
38	Oregon .....	Arbitrary rates, and not liberal.....	159
			52,175
	Colorado .....	.....	368
	Utah .....	.....	364
	Wyoming.....	.....	492
Total miles.....			53,399

Here was presented to the committee the array of facts showing that out of fifty-three thousand three hundred and ninety-nine miles of railroads in the United States in eighteen hundred and seventy-one, but five thousand eight hundred and forty-seven miles were operating under arbitrary restrictions covering all distances, and these were in the States of:

Maryland .....	671 miles.
Missouri .....	2,000 miles.
Kansas .....	1,501 miles.
California.....	925 miles.
Nevada .....	593 miles.
Oregon .....	159 miles.
Total.....	5,847 miles.

Of these few States, Missouri, with its two thousand miles of road, should legitimately be stricken out, for although the law is arbitrary in terms, the provisions and exceptions make it more liberal than the laws now in force in California, as will be seen from the following quotation:

(From the general laws of Missouri, adopted in Revising Session of 1865-66.)

ROADS LIMITED TO SIX CENTS PER MILE FOR PASSENGERS.

"Section Thirty-one. Every such railroad corporation shall arrange and classify all property usually carried by them over their roads, and shall affix thereto the rates respectively at which the same shall be transported between the several stations or points of connection or intersection of other roads, which rate shall be per one hundred pounds, and shall not exceed for distances less than:

Fifty miles first class.....	20 cents per ton per mile.
Fifty miles second class.....	15 cents per ton per mile.
Fifty miles third class.....	10 cents per ton per mile.

Fifty miles and over, but less than one hundred miles:

First class.....	15 cents per ton per mile.
Second class.....	10 cents per ton per mile.
Third class.....	7 cents per ton per mile.

For distances of one hundred miles or more:

First class.....	10 cents per ton per mile.
Second class.....	8 cents per ton per mile.
Third class.....	5 cents per ton per mile.

"*Provided*, that this shall not be deemed to apply to articles usually considered extra hazardous, like acids and gunpowder, or especially liable to damage, like looking glasses and furniture, or of great bulk in

proportion to weight, like baskets and feathers, or difficult to handle, like heavy machinery and large safes; and *provided*, that the same shall not apply to transportation of live stock and lumber, which may be a rate per car, and that they shall be entitled to charge not less than fifty cents for such single package or lot of freight." \* \* \* \* \* "But nothing in this section shall prevent railroad companies from contracting with shippers for transporting freight by express or passenger trains at such rates as the parties may agree upon."

Here, then, was a single law in force in a State whose natural resources are probably second to none in the Union, at a period four years subsequent to the enactment of the laws of California now in force, and that, too, in face of the fact that Missouri had at that year exactly as many miles of railroad in operation as California had in eighteen hundred and seventy-one, to wit: nine hundred and twenty-five, and a population of over one million one hundred and eighty-two thousand, or more than twice the population of California in the current year; and yet the appreciation of the real wants of the people and the State was so clear and vivid in the minds of the lawmakers that this law was enacted, which in its provisions from first to last absolutely puts to the blush the falsely called liberality of the Pacific slope.

With maximums allowed upon any and all classes of cheap goods or merchandise of twenty cents per ton per mile, and the exceptions to be governed by the circumstances of the case and the value of the service rendered in the case of all that class of articles upon which alone in any State is the maximum rate ever charged, and upon which alone do the California companies now charge the maximum rates allowed by their law.

Therefore the committee think that the House will indorse their decision excluding Missouri from the list of the States which can be said to be operating under restrictive laws, which will leave but three thousand eight hundred and forty-seven miles of road, including California, in the entire United States that in all respects are operated under rigid laws similar to that of California.

The significance of this fact will be more apparent when reviewed in comparison with the total mileage of the Union, which being at that date (1871) fifty-three thousand three hundred and ninety-nine miles, would make the miles operating under legal restrictions but .07 per cent of the entire railways of the Union.

If usage, custom, and the practice of the great majority of the States has any weight whatever in determining the practicability or estimation in which arbitrary restrictions are held, this showing is conclusive.



## OHIO.

The law of Ohio is of almost equal liberality with that of Missouri, when closely scanned, as will be seen from the following quotation:

*Laws of May, 1852.* Railroads "may demand and receive for the transportation of passengers on railroads not exceeding three cents per mile, and for the transportation of property not exceeding five cents per ton per mile, when the same is transported a distance of thirty miles or more; and in case the same is transported for a less distance than thirty miles, such reasonable rates as may be from time to time fixed by said company or prescribed by law."

Here will be seen concisely how the entire question, if high or maximum rates is put unreservedly into the hands of the companies themselves, to be arranged in accordance with the necessities of the case, being unlimited in price in distances of thirty miles, which may be taken not only starting from termini, but at intermediate lengths along the road, and is to Ohio, with her population and resources, of far greater in liberality than the law now in force in California, and greater still than the actual rates of the Central Pacific Railroad, points with more force to the general conclusion, that even by its direct legislation, Ohio recognizes the impracticability of an arbitrary system of restriction on charges by rail.

## ILLINOIS.

In Illinois the constitutional restriction, limiting railroad charges, was adopted a year ago, after there were four thousand eight hundred and twenty-three miles of railroad in operation in the State, which had been constructed under laws non-restrictive, and hence claiming absolute immunity from the operations of this new restriction; and there being now a bitter contest between State and railroads, to test the right of the State to control the roads as attempted, and railroad building having practically ceased during the controversy, and the railroad companies in the meantime continuing to charge their usual rates, minimum and maximum, the committee could not class that State among the restrictive States.

## NEW JERSEY.

The laws of New Jersey permit charges upon all light goods at the discretion of the Directors, and as such goods usually are the only subjects of maximum rates in any State, New Jersey could not be included among the restrictive States.

## TEXAS.

Texas, by a special charter to the "Sabine Pass and Red River Rail-

way," limited the passenger fares to five cents per mile, and freight to ten cents per mile. But no record can be found by the committee to show that this road was ever in actual operation; hence Texas was stricken from among the restrictive States.

The result of this branch of the investigation is that out of thirty-seven States only six are restrictive upon freights and fares; and out of fifty-three thousand three hundred and ninety-nine miles of railroad, only three thousand eight hundred and forty-seven miles, or seven per cent of the whole, are governed by a rigid maximum rate, and that even such maximum rates were all more liberal than the present maximum of the State of California, and far in excess of those proposed by the bills under examination.

*Rigid rates per mile are not usually applied to railroads throughout entire lines, but local circumstances control local rates in other States as well as in California.*

The next question which occupied the attention of the committee was whether in actual practice within other States a different rate per mile was adopted for different localities upon the same road, or for different years or seasons of a year, or for different roads in the same State; also, whether there was a great or small difference between the average minimum and the average maximum rates charged in States older in railroad experience than California.

The State of Ohio was taken as a test, because the reports and statistics of that State were more available to the committee, and it appears from the published tariff tables, that a rigid tariff to be applied to an entire State is impracticable. From the evidence pointing to this conclusion the committee will insert here extracts taken from the official report of the Ohio Commissioner of Railroads for eighteen hundred and seventy and eighteen hundred and seventy-one, with the necessary explanatory comments. It must be remembered that Ohio is a State having one mile of railroad to every eleven and two tenths miles of territory, while California has but one mile to every two hundred and four and three tenths miles of territory, and also that Ohio has a population of sixty-six to one square mile, while California has but three; in other words, that Ohio has by population twenty-two units of revenue to California's one, and by the division of its area among the railways, about eighteen miles to one of California; and with this in view the following selections from evidence showing actual charges on the roads in Ohio will tend to prove that the rates now allowed by law in California are in fact too low.

The report of the Ohio Commissioner gives the

Average highest rates on through passengers for the entire State .....	3.55 cents.
Average highest rate on way passengers.....	4.35 cents.
While the actual highest rate on way passengers is.....	10.00 cents.

The magnitude of these rates, compared to the resources which every mile of road in Ohio has in population, appeared to the committee out of all proportion to the rates actually known to be charged in California. In Ohio the

Average highest rate is reported on through freight at.....	6.45 cents.
Average highest on way freight.....	12.29 cents.
While the <i>actual</i> highest rate per ton is.....	40.00 cents.

Were the evidence to go no further, the fluctuations shown and permitted by the laws of Ohio, from six forty-five one hundredths cents to forty cents per ton per mile, would prove that as far as the experience and usage of that State were concerned rigid laws for all grades, roads, and localities were absolutely impracticable. The committee will cite, however, more in detail from examples of the actual charges in that State on different roads, so that the House may see how irresistibly the experience of that State pointed and led to the conclusion arrived at by the committee. On pages one hundred and fifty-three and one hundred and fifty-four of the Ohio report for eighteen hundred and seventy, the workings of the Cincinnati and Zanesville Railroad Company exhibit the following rates, the road being one hundred and thirty-two miles long:

FREIGHT.	Highest.	Average.	Competitive Rates
First class through.....	5.9	4.7	5.4 to 4
First class way.....	24.	6.9	.....
Second class through.....	4.7	3.1	4.2-10
Second class way.....	18.	5.6	.....
Third class through.....	3.1	2.4	2.8
Third class way.....	15.	4.	.....
Fourth class through.....	3.3	1.8	2 to 1.4
Fourth class way.....	4.	2.	.....
General average.....	.....	.....	3.63

Per ton per mile as against a maximum of twenty-four cents. Based

upon population per mile of road, California should be permitted to charge an average and maximum much greater than now allowed by law.

The Carrolton and Oneida Railroad, with a length of twelve miles, has a passenger rate of six and one quarter cents, and for freight:

FREIGHT.	Highest.
First class through.....	20 cents per ton.
Second class through.....	16 cents per ton.
Third class through.....	15 cents per ton.
Fourth class through.....	13½ cents per ton.

The Cleveland, Zanesville, and Cincinnati Railroad—length sixty-three and three quarter miles:

FREIGHT.	Highest.	Average.
First class through .....	7.41	6.00
First class way .....	26.60	10.00
Second class through.....	6.66	5.00
Second class way.....	27.00	9.00
Third class through.....	5.4-7	5.00
Third class way.....	23.33	8.00
Fourth class through.....	3.67	3.00
Fourth class way.....	23.33	5.00
Fifth class through.....	3.67	3.00
Fifth class way.....	10.00	3.42

Here is a fluctuation from the lowest average of three cents per ton per mile to twenty-seven cents per ton per mile, which was probably demanded by the circumstances of the locality.

The Iron Railroad Company—length, thirteen miles. Passengers from two to four and a quarter cents:



FREIGHT.	Average.
First class through .....	26.06 cents
First class way .....	40.00 per ton
Second class through .....	24.60 per mile.
Second class way .....	37.00
Third class through .....	23.00
Third class way .....	34.00
Fourth class through .....	12.60
Fourth class way .....	17.80

Lake Erie and Louisville Railroad—length to be one hundred and seventy-five miles. Now in operation (eighteen hundred and seventy) thirty-seven miles:

PASSENGERS.	Highest.
First class through .....	3.25
First class way .....	6.00

FREIGHT.	Highest.	Average.
First class way .....	33.00	8.00
Second class way .....	26.00	7.00
Third class way .....	20.00	6.00
Fourth class way .....	13.00	5.00

Michigan Southern and Northern Indiana Railroad—length, five hundred and twelve and thirty-eight one hundredths miles:

FREIGHT.	Highest.
First class through .....	4.90
First class way .....	28.00
Second class through .....	4.10
Second class way .....	20.00
Third class through .....	3.30
Third class way .....	16.00
Fourth class through .....	2.00
Fourth class way .....	12.00

It would naturally be supposed that a road as handsomely endowed by rich side country and population as the one above quoted, would have no need of such differences as exist between the lowest through of two cents per ton per mile, and the highest way of twenty-eight cents per ton per mile, and it is but an additional point of proof to the committee that the usages of the roads of Ohio will not permit the establishment of any rigid rates. This line of evidence is in itself voluminous enough to fill the entire report. But the committee will cite only a few examples from States, where it would be supposed that population and traffic would warrant the utmost minimum of rates to be charged, with the least possible fluctuations.

The Vermont and Massachusetts Railroad, from the report of eighteen hundred and sixty-nine, exhibits the following facts about the business and necessity of discriminating between the low averages and the maximums demanded by local business:

FREIGHT.	Cents.
First class through.....	7
Second class through.....	6
Third class through.....	5
Fourth class through.....	4
First class way.....	12
Second class way .....	9
Third class way .....	8
Fourth class way .....	5

When it is considered that the population of Vermont is three hundred and thirty thousand five hundred and twenty-two, and its area is ten thousand two hundred and twelve square miles, the comparison with California rates will be greatly in favor of the latter State. And equally favorable to California is the comparison, if made with the published rates taken from such tariff books as could be obtained by the committee, and which results are submitted in the following table, showing how rapidly the most surprising maximums are reached and demanded by roads that are usually associated in the minds of the people of California with very extreme low rates.

## STATEMENT

*Showing maximum charges for freight per ton per mile on the following rail-roads, taken from the published tariff books of said roads for the years 1869-1870.*

NAME OF ROAD.	For more than five and less than fifteen miles.....	For more than fifteen and less than thirty miles....	For more than thirty and less than fifty miles.....	For more than fifty and less than one hundred miles..	The whole length.....
	Cts.	Cts.	Cts.	Cts.	Cts.
Union Pacific.....	24.00	13.84	12.17	11.29	7.75
Lake Shore and Michigan Southern.....	24.00	12.80	10.63	8.48	.....
Erie Railway.....	35.00	13.33	10.00	8.43	4.34
Ohio and Mississippi.....	32.00	13.20	12.00	9.85	5.64
Illinois Central.....	36.00	24.00	17.33	13.33	10.76
Vermont Central.....	33.33	11.85	10.23	9.35	5.42
Burlington and Missouri River.....	33.33	17.85	16.66	11.64	7.82
Chicago and Alton.....	23.33	16.00	14.05	10.21	.....
St. Louis, Vandalia, Terre Haute and Indianapolis.....	60.00	20.08	13.59	10.05	5.79
Michigan Central.....	26.00	14.78	11.05	8.54	.....
Little Miami and Columbus and Xenia.....	26.00	20.00	8.00	6.24	4.91
Kansas City, St. Jo and Council Bluffs.....	45.71	24.80	20.97	14.00	10.54
Oregon and California.....	28.57	16.42	14.09	12.17	12.19
Columbus and Hocking Valley.....	22.22	13.91	10.00	8.33	7.36
St. Louis and South Eastern.....	34.28	13.60	13.72	10.52	10.52
Indianapolis, Bloomington and Western.....	37.77	20.00	15.00	9.41	6.60

The conclusion reached by the foregoing comparison is, that assuming Ohio to be a representative railroad State, it is apparent that upon different roads different rates are adopted; and while the general average of through rates is exhibited at six and forty-five one hundredths cents per mile, some roads actually collect a much larger rate; and if the rule were carried out, that the rates in a State should decrease in proportion as the population increases, California would be entitled to a very much larger maximum than she now enforces by law; and it is a further legitimate conclusion, whatever may be the words of the law, the effect is not restrictive except with a very great latitude.

*The difficulty of establishing a rigid tariff which will protect all shippers from hardship, and not be prohibitory upon some kind of goods.*

This subject is best illustrated by reference to the present tariff of the Central Pacific Railroad Company between Oakland wharf and Sacramento, a distance of one hundred and thirty-five miles. In order to

instruct station agents upon rates of freight to be collected by them, the company find it necessary to classify all freight liable to transportation into thirteen classes, to wit: first class merchandise; one and a half first class merchandise; twice first class merchandise; three times first class merchandise; and nine distinct car load rates. Also, to furnish fixed estimated weights of not less than twenty-two varieties of freight. Having first a knowledge of such classification, the station agent can read the local freight tariff, as follows:

FREIGHT.	Price.
Merchandise, first class, per one hundred pounds.....	18
Flour, grain, potatoes, per one hundred pounds, eighteen thousand pounds or over, car load A rate.....	17
Car load rates, class B, per ton.....	\$3 70
Car load rates, class C, per ton.....	3 00
Car load rates, class D, per ton.....	3 10
Car load rates, class E (live stock), per car.....	32 00
Car load rates, class H, per car.....	25 00
Car load rates, class I, per car.....	25 00

And by reason of the present statute the following rule is enforced upon all station agents: "Freight charges must not exceed fifteen cents per ton per mile in the State of California, or twenty cents per ton per mile in the State of Nevada, except that no lot of freight shall be taken for less than twenty-five cents." By this rule the statute is complied with and the classification of freights adhered to. In this respect we find no difference between the railroads of the State of California and the roads of other States. Of so much importance and difficulty is this matter of classification, that all the railroad agents in the Union unite in a Convention at least twice in each year to change, alter, or modify the classification, and many times exact justice is found to be impossible. While these facts alone ought to be considered sufficient to deter any Legislative Committee from any attempt to regulate fares and freights without classification, yet we have gone further, and endeavored to ascertain the reasons for the evident obstacles to our success, and we find them to be *facts necessary to be understood to construct a rigid and just tariff regulating freights and fares.*

The elements of information necessary to be considered in constructing a freight tariff are as follows: character and length of the road to be governed, classification of the freights to be transported, population along the line of the road and the adjacent country, grades, curves, altitudes, climate, and source of supply of fuel and materials for repair of



the road, bridges, or culverts. *Character and length* of the road is an important element, for it has been proved that if the road were level the power required to do the work is less than upon the grades; and the length is equally to be considered, for experience has shown that when a train is once loaded the greater number of miles it can be carried at a rate per mile before unloading, is in that proportion more remunerative to the company by a saving in labor of handling the goods, and the time lost, and the wear upon the rolling stock in consequence of stoppages.

*Classification of freights* must also be made. An ordinary freight ear will weigh from eight to nine tons, and is capable of carrying twenty thousand pounds; and a common carrier is to a certain extent an insurer against the losses resulting from neglect or carelessness of his employés. It cannot be contended that the carrier's risk is as great upon a carload of bricks as upon a carload of acid in carboys, hence the carrier can do a more profitable business by transporting bricks entirely, than acids at the same rate. The same comparison can be made between pig iron and glass mirrors; marble statuary in boxes and not in boxes; ore and glassware; wool in bales and wool made into fine broadcloth. Again, an entire train may be filled with a freight so light that when the freight is charged by the pound the amount collected will not equal that which would be due from a single carload of a heavier article, like wheat, coal, or iron. Hence feathers should not be carried as cheap as salt or cement, nor bureaus as cheap as lumber; nor can the consumer or shipper afford to pay an equal rate of freight upon all classes of goods, such as upon wool raw and wool manufactured. A suit of clothes weighing five pounds could afford to pay more freight than five pounds of raw wool, and if the former could be carried at a large profit without infringing the law, the latter could be carried at actual cost, without injury to the carrier and no hardship upon the shipper or consumer. The same comparison can be made between gold ore and gold bars; silver ore and silver bars; exportation of wheat and importation of ores or coal; fence posts and sawed lumber; shakes and shingles; stone, undressed and dressed, etc.

*Population.* Population along the line of a road and in the adjacent country feed the road and furnish it business, and of so much importance is this matter that long roads adopt it as a policy to encourage by actual contribution all tributary roads. The Central Pacific Railroad furnish free of charge all the rolling stock required or used by one small road, whose limited means were expended when the rails had been laid.

*Source of supply of fuel* is also an important consideration, inasmuch as

the Central Pacific Railroad are obliged to transport the largest portion of their coal from Wyoming Territory, a distance nearly equal to that from Chicago to Massachusetts.

#### GENERALLY

All the elements of information to construct a tariff may be discussed under two heads :

*First*—The natural obstacles to be overcome in building the road, and afterwards in operating it, which comprises all climatic considerations and extraordinary dangers or injuries resulting from snow or rain storms.

*Second*—The proportion of the full capacity of the road which can be kept in useful and profitable employment, and the relation which that bears to the total cost of the investment.

To apply these principles and construct a local tariff for California was the next effort of the committee, who found, generally :

*First*—It appears from the evidence that California possesses an array of difficulties to be contemplated in building roads which should enter very thoroughly into all considerations touching the legislation upon railroad finances. The road or roads looking eastward have a chain of mountains to surmount which have no parallel anywhere else in North America, with a continuous succession of difficult grades and a hazardous snow belt to traverse. On the south, while the mountains are lower, the long stretch of desert country between the south rim of the San Joaquin Valley and the Colorado River presents scarcely a more inviting passage. The developments of the past twenty years have shown that our valley roads must be prepared for disastrous droughts which almost completely destroy the great source of revenue from the transportation of field productions, and which is intensified by a corresponding lack of water to promote and invigorate the great mining interests of the State among the mountains and foothills. The seasons have developed the fact that during some years of the decade, roads must keep rates low enough to enable the farmer and people to endure the privations of drought and lack of crops, and keep up the coherence of the community. On the other hand the lesson of the winter of eighteen hundred and seventy-one and eighteen hundred and seventy-two has taught us that from the extreme of disastrous drought to the plenitude of overwhelming freshets is but a short step, and that the railroads of the State of California must contemplate the total or partial demolition of roads, bridges, and structures generally with the same fortitude that the depletion of the company treasury developed by the disastrous lack of business in previous years of drought. These natural obstacles must be

deliberately scanned by all capital contemplating the building of railroads here, and in consequence of the violent changes in the source of revenue occasioned by them, must enter largely into any consideration before any legislation affecting the finances of railroads. And indeed, until the extraordinary emergencies of drought and flood are provided against by a very large average business, it would, in the opinion of the committee, be suicidal on the part of the State to reduce the present maximums allowed by law for every class of railroad service.

These natural obstacles existing to the first building of roads in this State are intensified in the operation of them. The constant necessity of keeping up the organization and movement of trains on a road, regardless of the scarcity of crops, freight, or passenger travel, and during sudden and disastrous storms, and devastating floods or heavy snows, and the rebuilding of snow-sheds destroyed by conflagrations, and the building of new roads, culverts, and bridges washed away, besides the loss of travel and revenue consequent thereto, are difficulties attendant upon the operation of railroads. But in California, where our rain seems to fall in large quantities within short periods, the destruction of railroads is more certain to occur and not so surely to be prevented. All earlier engineering experience seems to be at fault here, and new rules must be discovered and applied to prevent such disasters; and in this respect California is peculiar to itself, and therefore demands peculiar consideration in fixing maximum railroad rates of freight. It was the combined opinion of engineers of long experience in California and elsewhere, that the various waterways of the Central and Western Pacific roads were more than ample, when measured by ordinary rules of engineering; but when measured by the precipitated floods of this Winter, were found too small and were frequently destroyed, and that there is a vast difference in the effects produced by a Winter's rain condensed within a few weeks or spread over the entire season. And it would appear that a rate of freight fixed, for instance, in consequence of the probable plenty of the season of eighteen hundred and seventy-two might be absolutely ruinous to a railroad company in two years later. Apparently, the existence and growth of a large average business through a series of years is the only safeguard and balance which will justify the establishing of rates at any low average, and even then comes the difficulty of fixing rates without a classification of freights.

*Comparative cost of operating the mountain and valley divisions of the Central Pacific Railroad.*

It appeared to be clearly proved that the cost of operating the mountain division of the Central Pacific Railroad was from five to six times

that of the valley divisions. From the evidence it appears the prominent feature of the increased cost is the increased power required and actually used in doing the business of the road on the mountain division. Trains of forty-five loaded freight cars arriving at Rocklin, the first eastern station of that division, and drawn by one engine of medium weight and power, requires to be divided up into five trains of nine cars each, having an engine of larger power, before it can be lifted over the mountain from Rocklin to Truckee. Here is at once five times the expense of handling a given number of cars entailed upon the management over and above that incurred in the valleys. But a severe and additional expense must also enter into the calculation from the fact that these larger engines tear and destroy the track in a much increased ratio; that the use of brake power upon the train, in consequence of high grades, flattens wheels and grinds the rail, and that the strain on the beds and frames of cars demand a larger element of repairs than any where else on the line—swelling the increased cost of handling the traffic of the road from five to seven times that entailed in the valleys. When this comparison is applied to the charges actually made, it will be seen that as severe as are the natural difficulties the company require the through traffic to bear a very large share of the expense of doing the local business upon that division. From the engineering experts on the stand the committee gathered interesting corroboration of the main facts relating to this increased cost. It appears that experience and calculation have demonstrated that for every rise of twenty feet in a mile the work required to overcome the same is equal to the traversing of an additional mile of level line. In other words, one mile of road with a grade of twenty feet is equal to two miles of level road. This is a rule now universally admitted, and not at all depending upon the testimony of any individual.

The committee desired to ascertain how the application of this rule to the mountain divisions would compare with the experience in the Superintendent's department. From Rocklin to the summit of the Sierra Nevadas the rise is six thousand seven hundred and sixty-eight feet, which, divided by twenty, would give an equivalent of three hundred and thirty-eight miles of level line; adding the distance from Rocklin to the summit, or eighty-three miles, and there is work to be performed equal to four hundred and twenty-one miles upon a level line. From the summit to Truckee the fall is one thousand one hundred and seventy-one feet, to which, applying the same rule, we find its equivalent level to be fifty-eight miles, and adding the distance between the summit and Truckee of fourteen miles, results in the work to be performed equivalent to that on seventy-two miles of level line; so that from Rocklin to



Truckee, a distance of but ninety-seven miles, the actual equivalent in a level line is four hundred and ninety-three miles, or a little over five (5) times the actual length of the road itself. It will thus be seen that there is demanded five (5) times the power to operate this ninety-seven miles that would be required to operate the same distance in the valleys. Adding to this the constant extra wear and tear and general resulting damage which is easily demonstrated to occur in the Superintendent's department, and we found again that the actual cost of operating this mountain division is not less than seven (7) times that of a like distance in the valley. The direct bearing of this investigation upon the principle already laid down, that no arbitrary rates that could be made would be able to do justice to both producer and carrier, is to the committee perfectly evident in this, that in doing all business emanating and ending between the points of Rocklin and Truckee the company are legitimately entitled to charge six or seven times as much as they would be justified in charging for the same service rendered on the plains, and if the actual charges made do not exceed six or seven times the charges which would be justified for the same on the plains, the public are served with the strict justice demanded by the special features of the case.

*The carrying capacity of a road is not a criterion for tariff rates, unless the work is equal to the capacity.*

Freight tariffs must bear a proportion to the amount of transportation demanded, regardless of the carrying capacity of the road. Supposing another road may have cost the same as the road sought to be regulated, yet the profitable tariff of one may be a losing tariff to the other by reason of the absence of business to be done. Hence in the examination of the freight tariffs of eastern roads, the amount of tonnage and passenger traffic must be first ascertained before a just comparison can be made. Thus the Erie Railroad, by its last year report, transported four million eight hundred and fifty-two thousand five hundred and five tons, which is ten thousand five hundred and twelve tons per mile of the road; while the Central Pacific Railroad transported in the same period, four hundred and fourteen thousand five hundred and thirty-one tons, or four hundred and four tons per mile—only one twenty-sixth part of the amount of the Erie business, yet was compelled to construct and keep in repair a road of equal length, and to support an organization and equipment of equal size, except in rolling stock.

The comparison of the service of the Central Pacific Railroad with the Erie and other roads, will more correctly appear in the following tables.

## ERIE RAILROAD—NEW YORK.

Number of passengers carried.....	3,275,625
Number of passenger cars on Erie road.....	274
Number of passengers carried per car.....	11,958
Number of tons of freight carried.....	4,852,505
Number of freight cars .....	8,840
Number of tons of freight per car.....	549

## CENTRAL PACIFIC RAILROAD—1870.

Number of passengers carried.....	666,594
Number of passengers per car.....	3,383
Number of tons of freight carried.....	414,531
Number of tons of freight per car.....	129½
Value of passenger cars—C. P.'s to Erie as .....	1 to 3.5
Value of freight cars—C. P.'s to Erie as.....	1 to 4.2

## COMPARISON WITH THE NEW YORK CENTRAL AND HUDSON RIVER RAILROADS.

Length of Central Pacific (miles).....	881
Length of New York Central and Hudson River Railroad..	842
Number of passenger cars on Central Pacific Railroad.....	197
Number of passengers carried.....	666,594
Number of passengers carried per car.....	3,383
Number of passenger cars on New York Central and Hudson River Railroad.....	445
Number of passengers carried.....	7,044,946
Number of passengers carried per car.....	16,056
Number of freight cars on Central Pacific Railroad.....	3,200
Number of tons of freight carried.....	414,531
Number of tons per car.....	129½
Number of freight cars on New York Central and Hudson River Railroad.....	9,026
Number of tons of freight carried.....	4,122,000
Number of tons per car.....	456.6
Value of passenger cars of the Central Pacific is to the New York Central and Hudson River Railroad as.....	1 to 4.4
Value of freight cars of the Central Pacific is to New York Central and Hudson River Railroad as.....	1 to 3.5

By a similar line of comparison with the Atlantic and Great Western, it is found that:

The difference in value of passenger cars is as.....	1 to 4.4
The difference in value of freight cars.....	1 to 4.7

## The Lake Shore and Michigan Southern Railroad:

Difference in value of passenger cars is as.....	1 to 3.2
Difference in value of freight cars is as.....	1 to 4.2

We have thus shown by comparison with four of the principal roads in the United States the fact developed that the rolling stock upon those roads, by and through which all of the traffic is carried, is actually worth to them about four times as much as the same kind and cost of rolling stock is worth to the Central Pacific Railroad; in other words, in order for the Central Pacific to gain the same effective return upon their investment in rolling stock, they should charge four times as much for every passenger and every ton of freight as either of the four roads mentioned, whether the units be the extreme maximums shown to be charged by the Eastern roads or the low averages collected by the same roads; and thus it will appear in greater or less proportion whenever the Central Pacific Railroad is compared with other Eastern roads, and the capacity and tonnage both considered. And should this Legislature attempt to apply to California railroads the tariff of Eastern roads without inquiry into the questions of capacity and tonnage, the injustice will be done of compelling one road to do its business at a loss, while another having a larger business could comply with the same law of tariff and make a profit.

*Short distances between way stations demand high rates.*

It will be seen by the tables quoted that Eastern roads collect high way rates. The justice of this can be made apparent by a few examples. Suppose the stations to be ten miles apart, and two buggies are to be carried, weighing in all one thousand pounds; they occupy one entire car, weighing twenty thousand pounds; the freight, at seven and one half cents per mile, is seventy-five cents, of which one half must be expended by the company for loading and unloading. A piano weighing five hundred pounds will earn a freight of thirty-seven and a half cents, while it would cost three times that money to load and unload it, and a larger sum to insure it against loss from carriage.

The principle that a large difference is indispensable between way and through freights is so universally recognized that further argument seems useless.

Should way rates be fixed too low, railroad companies would be justified in abandoning frequent stations, which would result in great inconvenience to the public without loss to the railroad.

*Rates of freight and fare in the State of California are very low in view of all the facts necessary to be considered in constructing a tariff.*

An examination of the various exhibits attached to this report must convince even the most skeptical that the actual and average rates now charged in the State of California are as low comparatively as any of the Eastern States.

It is understood by the committee and corroborated by the evidence of all the witnesses, that an important element in determining the value of rates is the work actually performed as compared to that on other roads; hence, in considering the question whether the California rates are high or low, reference must be had directly to circumstances of the road and to the service performed, as well as to the tariff. Upon that point the exhibits attached hereto will be found so exhaustive that the committee will simply direct the attention of the House to them.

The grain, lumber, wool, wood, ice, and general merchandise are carried at average prices lower than anywhere else in the United States, when compared to the amount of tonnage done by other roads. In most instances, as shown in the exhibits, the charges made are no higher or not as high as Eastern roads doing many more times the business and operating under no such climatic disadvantages as surround the business of California roads. In the handling of merchandise on short distances, or on the most difficult portions of the mountain line, the rates in California are very far below that of any Eastern road whose records were obtained by the committee. By reference to "Exhibit B," it will be seen that the Erie Railway does a business per mile of twenty-six times that of the Central Pacific, and yet the average rate of the Central (from three to five cents per ton per mile) is but little more than the average of the Erie, and the maximum rates of the Central (fifteen cents) are not half so much as the maximum rates of the Erie (thirty-five cents). The New York Central does a business of 13.8 times as much per mile as the Central Pacific, yet its average rates (2.21 cents per ton per mile) bear no such reduced proportion to the average of the California road. Comparisons with every road named in the exhibit will show how largely the California road has reduced its average charges in proportion to the business done. The rate on ordinary merchandise from San Francisco to Modesto is but 3.9 cents per ton per mile; to Marysville, but 3.15 cents per ton per mile; to Sacramento, but 2.6 cents per ton per mile; and to Colfax, but 4.22 cents per ton per mile; to Truckee, but 7.3 cents per ton per mile. Intermediate rates vary from these to the maximum allowed by law, according to the amount and quality of work done, but in no instance coming beyond one half of the maximums charged



for short service on Eastern roads, and in some instances but one fourth of such charges; and, as shown on a preceding page, as soon as the general business of the State expands sufficiently to promote the growth of many stations and towns near each other on the line of the road, and when the demand for use of cars and engines will be constant and large, the limit now allowed by law will be far from being sufficient to warrant the railroad companies of the State to make any great exertions to accommodate such a local business on short distances; and this view of the committee is based partly upon the Eastern practice developed in the extracts from official reports quoted in a preceding portion of this report, and from the tariff rates in exhibit of the maximums now charged elsewhere, and partly upon the abstract justice of allowing a company to be compensated exactly for every act of service rendered the public. The charges per ton per mile made for service upon the mountain line, comprised in the Counties of Placer and Nevada, are exceedingly low when viewed in the light of the difficulties to be overcome and of the great disproportion between the expenses of operating through those counties and the revenue derived from them.

By reference to Exhibit G it will be found that the total receipts from freights by the Central Pacific Railroad from these two counties was in the year eighteen hundred and seventy-one only two hundred and three thousand four hundred and ninety-five dollars, or one fourteenth of the gross receipts from freights of the entire road for that year, yet the natural difficulties in the way of operating the line through those counties require the expenditure of one fourth of the running expenses of the entire road to be made in the two Counties of Placer and Nevada.

How, then, can way charges be reduced in those counties which require an expenditure of one quarter of the expenses of the entire line, and yields only one fourteenth of the gross earnings? These facts should be a complete answer to the complaints about high charges made by the people on the road from Colfax over the Sierra Mountains to the State line.

#### SACRAMENTO DAILY UNION.

The newspaper above named has called the attention of the committee to a table of fares and freights which it published, and which will be found annexed to this report and marked Exhibit I. This table purports to be the rates of freight and fare charged upon the railroads in it named; and under the rules for the construction of a tariff hereinbefore laid down, the table published by the *Union* would warrant a large

increase of rates by the Central Pacific Railroad over and above the present maximum rates. This is more clearly shown in "Exhibit K," entitled "Supplemental statement showing in last four columns the rates which the Central Pacific Railroad should charge, if value of rolling stock and number of tons per mile, compared with each of the subjoined roads, are considered as base of comparison."

#### CONSOLIDATION OF RAILWAY INTERESTS.

At different times the committee have been called upon to consider objections to the continued existence of the present laws of the State of California on account of the consolidation of various railways into the control of the Central Pacific Railroad Company; but as yet there would seem to be no cause for alarm in this direction.

A control of nine hundred and twenty-five miles of railway by one company would not be considered a great monopoly in other States having from one thousand five hundred to four thousand eight hundred and twenty-three miles of railroad within their respective boundaries; and there are many advantages derived by the public from a consolidation, especially where the business of the entire State is scarcely sufficient to support one organization, and the consolidated corporation exhibits no intention to override personal rights or to extort exorbitant passenger or freight rates.

The law of California authorizing railroads to be constructed is open to all capital, conferring the same advantages that the present company has had; but this will cease to be true if the bills now under consideration should be passed by this Legislature. An income assured to a railway under a tariff which is not oppressive upon the shipper is an element of permanent prosperity to a people; for the true interest of the railway investment is not only to establish but retain business, and no law is so potent to that end as the perfectly regular and steady rates charged on roads under one management; one Superintendent's department governs and supervises a system of roads which otherwise would require several departments; one system of accounts; concentration of expenditures, uniformity of management, interchange of rolling stock at convenient periods; the distribution of losses over more miles of road, hence requiring less fluctuation in price from accidental causes—all are evident advantages, which, added to the fact of producers being able to predict with some certainty the continuance of certain rates, makes consolidation by no means an evil or a proceeding to be looked upon with distrust or enmity by a people.

## POLICY OF THE STATE.

The committee have now brought the subject down to a consideration of the future policy of the State with reference to its railroad laws and legislation. It must be admitted without argument that all investments in railroads must or should be allowed sufficient freedom in their financial management to secure as fair a return upon the money expended as any other investment of like amount should or would have; and in granting that right it at once becomes a question for consideration how much and how often should a State interfere in the business of a corporation where there are no definite or well assured complaints.

In the opinion of the committee it is not competent for the State to attempt to take into consideration the fact of the Central Pacific of California having received assistance in building the overland road. Such a consideration is illogical and ungenerous, and if the right of the State to regulate its internal commerce were based upon no higher claim than that, having assisted a man once, then forever after it must and can exercise the prerogative of prying into his affairs, regulating his business, or curtailing his profits, the law of government would be frail indeed.

Whatever aid has been rendered by the State or a county has already been returned to it many fold by the increased taxable property, by the opening of channels of communication and supply, and the reduced cost at which the citizens of the State are enabled to obtain their supplies. Further, not only all the money so furnished by such State or county was expended and now remains there in taxable property, but other and larger sums have been added and expended in the same manner and within the same limits.

This statement will appear more forcibly when we examine the following statement of taxes paid by the Central Pacific Railroad Company in the various counties, to wit:

COUNTIES.	1870.	1871.
Sacramento County.....	\$20,771 88	\$17,334 28
City of Sacramento.....	3,233 63	6,785 68
Placer County .....	40,130 87	24,124 46
Nevada County .....	8,238 74	10,335 76
Alameda County .....	20,775 56	20,637 04
San Joaquin County .....	10,802 67	11,555 14

In the entire State in 1870 .....	\$128,510 41
In the entire State in 1871 .....	132,290 04

Besides the taxes in the State of Nevada and in Utah.

If the State of California extended a comparatively small amount of aid to the Central Pacific Railroad, that gives the State no claim to regulate the affairs of the company; the State, as would a private party, relinquishing all such claims by the very act of agreeing to aid for and in consideration of certain acts to be performed by the company, which being performed, as is universally admitted, the State has no further right, either legal or moral, to assert any control over the movements or management of the road, its part of the definite contract being performed. Were such a right once admitted in ethics, a man has but to make one contract with a neighbor, he assisting somewhat in the fulfillment thereof, and he can haunt that neighbor forever afterward, claiming control and conscience power over him. The lack of substantial good sense and logical acumen in this plea as related to the national aid to the Central Pacific Railroad is still more apparent, as the question properly belongs to the entire people of the United States. The bonds loaned the company were not State bonds, but United States bonds, secured by the faith of the entire nation and the strength of the entire national credit. The people of the nation are interested in seeing that the enterprise which has promised to pay them back their millions at maturity shall not be hampered or restricted in its means of doing so; and when the plea is made by either citizens or public men of this State, that because these bonds were loaned, and by their aid the road was built, the State gains an additional right over the proceedings and business of the corporation, such plea must be unceremoniously dismissed, and not permitted to influence any legislation on these questions which will seriously affect the operation of the railroad system.

*The United States Government and the Union has an interest in the question of the reduction of railroad fares and freights.*

Have the people of California ever contemplated how minute is her minority interest in the railroad aid extended by the National Government to the Central Pacific Railroad Company? The valuation of the property of the United States by the last census was :

In the year 1870.....	\$14,331,343,475
And of California in the year 1870.....	296,644,088



Or about two and three fifths per cent of the whole. Should this small proprietary interest of two and three fifths per cent seek to control the railroad to the injury of the remaining ninety-seven and two fifths per cent? But nothing can be more certain than that from whatever source the means to construct the road was derived, the business must be carried on, the expenses of the road must be paid, the interest and securities must be met and profits assured; and to lose sight of such considerations in this discussion is to neglect and overlook the interests of the entire United States who are interested to the extent of ninety-seven and two fifths per cent to two and three fifths per cent in the permanent prosperity of the California railroads. Again, it is ungenerous for a donor to urge this plea at this time when we remember that the very coherence of the nation was more assured and the evidence of its integrity sent ringing most triumphantly across the ocean by the efforts of the men who worked all through that mighty struggle to put a perpetual band of literal iron between the east and the frontier west.

This plea, although so often proclaimed from floor and stump, the committee think has really never been fully considered, for the American people, with all of their intense self will and individuality of pursuit, cannot be so ungenerous or illogical as to seriously urge such a pretext for legislative interference with the national highway.

*A reduction of the present tariff would discourage the construction of new roads.*

It must be remembered that the Central Pacific Railroad has been constructed under the present law; and if that is liberal, any reduction made now would aid the road named to the discouragement of any new road. A road now in operation could better afford to be controlled by a low tariff than a new road without an established business. This has been illustrated in the State of Illinois, where the low tariff was adopted after all railroads were constructed, and it had the effect to stop all further railroad construction. New roads building and to be built, as they penetrate outlying country, are entitled to every possible encouragement which the State, by legislation or absence of the same, can give them, and it would be worse than unfair to the railroads unborn to take the hard-earned facilities and advantages gained by ten years' experience of the Central Pacific Railroad as a basis to fix the rules and government of roads just beginning life. It must not be forgotten that California has but one mile of railroad to two hundred and four square miles of territory, while

New York possesses one mile to.....	11.9 square miles.
Pennsylvania possesses one mile to.....	9.8 square miles.
Ohio possesses one mile to.....	11.2 square miles.
Illinois possesses one mile to.....	11.5 square miles.
Missouri possesses one mile to.....	32.6 square miles.
Massachusetts possesses one mile to.....	5.2 square miles.

And from this comparison will be seen how fast the development of California is yet to be made; and keeping in view the actual fact of the laws and usages of these States, permitting far more liberal charges than now permitted upon California roads; the necessity of some change in the law of the State which shall make it more in harmony with the best practice of the most prosperous Eastern States has become apparent to the committee.

*Prosperity of California not dependent upon a rigid tariff.*

The growth and prosperity of a State does not depend upon any system of rigid legislation, but upon its own natural resources capable of development, and railroads built through such States will have an effect to confine freight and passenger tariffs within satisfactory limits in a way more potent than any laws.

SCHEDULES.

In the Exhibits A, B, C, D, E, F, G, H, I, and K, hereto annexed, will be found comparative statements of the tariffs of the different eastern railroads with the Central Pacific Railroad, and various important statistics and data in regard to the latter road. Exhibit L is a statement of steamboat charges before railroads were inaugurated in this State; and Exhibit M exhibits the benefit which various counties in this State, and the whole State, derive in taxes from the Central Pacific Railroad Company only.

INJURIOUS TENDENCY OF THE PROPOSED LEGISLATION.

The adoption of the proposed bill would tend to raise the rates of freight where it is now low, and thus would work an injury to the shipper and consumer, and because the system of classification of freight has been ignored, those freights which should be moved at bare cost, and which in fact are now so moved, could not be carried at any price named in the proposed bill without loss to the shipper. It would cause manufactured goods to be moved at lower rates than they can afford to pay without a corresponding decrease in freight on the raw material.

It would discourage the construction of new railroads, and thereby tend to increase the monopoly power of existing roads.

It would be an act of bad faith to the whole United States, by not assisting in the accumulation of a Reserve Fund to pay the indebtedness of the railroad to the United States.

It would be an act of bad faith to the holders of railroad securities who purchased, supposing, as they had a right to do, that the existing law was a part of the corporate act of the railroads formed under it, and hence was inviolate until the indebtedness was paid.

And if the proposed law should be adopted and enforced without injury or injustice to either railroad or shipper, this State will have accomplished more in that direction than any other State in the Union.

#### CONCLUSION.

*To recommend that the bills do not pass, but that legislation be had to require from railroad companies annual statistical reports of receipts and expenditures.*

To the committee, the contemplation of the entire subject matter embraced in this report points inevitably to two remedial courses to be taken:

*First*—Such amendments as shall secure the stability of the finances of the railroads of the State against injudicious or inconsiderate legislation by the adoption of the principle working so well in the States of New Hampshire, Vermont, Massachusetts, Rhode Island, New York, and Ohio, which is that a certain percentage upon the actual investment shall be assured to the companies before it shall be competent for the State to interfere by legislation.

*Second*—By such an amendment as shall secure to the State full and authentic data and reports, such as are now being made in the best regulated Eastern States, from all the roads of the State to a State officer, who shall be authorized to classify and tabulate these reports in such form as shall best and more fully show to the people of the State the exact condition of the roads, their business, its character and profit; and with such reliable information before them, the committee believe that hereafter there will be less or none of this agitation, so vexatious to the Legislatures of the State. The value of such a class of public information to all classes of the public can hardly be estimated in giving a close sympathy with the actual workings of the railway system of the State, and permitting such knowledge as shall prevent any legislation from being made except in the light of the clearest facts.

With this in view, the committee return the bills, the consideration of which has been the subject of this report, and recommend that they do not pass.

GILES H. GRAY, Chairman,	} Committee.
ASA ELLIS,	
C. L. F. BROWN,	
H. M. HAYES,	
J. B. RICE,	
ROBERT BELL,	
M. J. WRIGHT,	
WM. R. WHEATON,	
WM. C. CONNOLLY,	}



# EXHIBITS.



## AN ACT

TO AMEND AN ACT ENTITLED AN ACT TO PROVIDE FOR THE INCORPORATION OF RAILROAD COMPANIES AND THE MANAGEMENT OF THE AFFAIRS THEREOF, AND OTHER MATTERS RELATING THERETO, APPROVED MAY TWENTIETH, EIGHTEEN HUNDRED AND SIXTY-ONE.

[Introduced December 7th, 1871.]

*The People of the State of California, represented in Senate and Assembly, do enact as follows:*

SECTION 1. Section forty of the aforesaid Act is hereby amended so as to read as follows:

Section Forty. It shall be lawful for two or more railroad companies to amalgamate and consolidate their capital stocks, debts, property, assets, and franchises in such manner as may be agreed upon by the Board of Directors of such companies so desiring to amalgamate and consolidate their interest, but no such amalgamation or consolidation shall take place without the written consent of three fourths of the value of all stockholders in interest of each company, and no such amalgamation or consolidation shall in any way relieve such companies or the stockholders thereof from any and all just liabilities; and in case of such amalgamation or consolidation due notice of the same shall be given immediately after such amalgamation or consolidation by advertising for one month in at least one newspaper in each county, if there shall be one published therein, into or through which such roads shall run, and also for the same length of time in one paper published in Sacramento and in two papers published in San Francisco; and when the amalgamation and consolidation is completed, a copy of the new articles of association shall be filed in the office of the Secretary of State. It shall be the duty of the said company or companies to make and maintain a good and sufficient fence on both sides of their property, and all necessary cattle guards at the crossing of each and all streets and lanes, roads, and highways; and in case any company do not make and maintain such fence and cattle guards, if their engine or cars shall kill, maim, or destroy any cattle or other domestic animal or animals when they stray upon their line of road, they shall pay to the owner or owners thereof a fair market price for the same; and in case they fail to pay for the same as herein provided after demand made, and suit be brought for the recovery of the value thereof, and judgment be in favor of the plaintiff in such suit, in addition to the costs usually recovered said company shall pay to the plaintiff in each case the sum of fifty dollars,

attorney's fees, as costs in the suit; and in case of the failure to build and maintain a fence or fences and cattle guards as herein provided, said company shall further be liable to the person or persons through whose land the line of their road or roads may extend for all damages that such person or persons may sustain by reason of their neglect so to build and maintain such fences and cattle guards, and after demands for payment of such damages, if suit be brought and sustained for the recovery of the same, there shall be included in the costs of said suit against such company the sum of fifty dollars, attorney's fees, as herein provided. If in any case a railroad company has heretofore or shall hereafter pay to the owner or owners of the land through which or alongside of which their road is or may hereafter be located an agreed price for making and maintaining such fence, or whenever the cost of such fence has been or may hereafter be included in the award of damages allowed and paid for the right of way for such railroad, such company shall not be relieved or exonerated from any claims or awards of damages in favor of any person or persons arising out of the killing or maiming of any animals as aforesaid, unless such damages are claimed by the person or persons whose duty it is under such agreement, contract, or award to make and maintain such fence. And the owner or owners of any domestic animals shall not be responsible to the railroad company for any damage or loss which may accrue to such company from such animals being upon the railroad track where such company shall have failed or neglected to make and maintain such fence as herein provided.

SEC. 2. Section fifty-one of said Act is hereby amended so as to read as follows:

Section Fifty-one. It shall be unlawful for any such railroad company to charge more than four cents per mile for each passenger with one hundred pounds or less of baggage, nor more than the following rates per ton for freight transported on such road: if such freight be carried sixty miles or over, the amount charged shall not exceed three cents per ton per mile; if carried fifty miles and not exceeding sixty miles, the amount charged shall not exceed three and a half cents per ton per mile, and shall not exceed one dollar and eighty cents per ton for the entire distance; if carried forty miles and not exceeding fifty miles, the amount charged shall not exceed four cents per ton per mile, and shall not exceed one dollar and seventy-five cents per ton for the entire distance; if carried thirty miles and not to exceed forty miles, the amount charged shall not exceed five cents per ton per mile, and shall not exceed one dollar and sixty cents per ton for the entire distance; if carried twenty miles and not to exceed thirty miles, the amount charged shall not exceed seven cents per ton per mile, and shall not exceed one dollar and fifty cents per ton for the entire distance; if carried any distance less than twenty miles the amount charged shall not exceed ten cents per ton per mile, and shall not exceed one dollar and forty cents per ton for the entire distance; and all loading and unloading of freight thus transported shall be done by or at the expense of such railroad company; *provided*, that in estimating the number of tons of freight, articles not usually weighed the estimated weight shall not be greater than as follows: for all case goods, furniture, and machinery, not less than forty cubic feet shall be estimated as one ton; not less than five hundred feet of lumber, or fifty common fence posts, or five thousand shingles, or two thousand five hundred laths, shall be estimated as one ton. One car load of horses, cattle, sheep, or other domestic animals shall not be estimated at more than ten tons. And for every transgression



of any of these limitations the company shall forfeit to the party suffering thereby the sum of one hundred dollars and the entire amount of freight thus paid, and the same may be recovered by suit in any Court of law having jurisdiction; *provided*, that in no case shall the company be required to receive less than twenty-five cents for any one lot of freight.

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## AN ACT

TO AMEND AN ACT ENTITLED "AN ACT TO PROVIDE FOR THE INCORPORATION OF RAILROAD COMPANIES AND THE MANAGEMENT OF THE AFFAIRS THEREOF, AND OTHER MATTERS RELATING THERETO," APPROVED MAY TWENTIETH, EIGHTEEN HUNDRED AND SIXTY-ONE.

[Introduced December 7th, 1871.]

*The People of the State of California, represented in Senate and Assembly, do enact as follows:*

SECTION 1. Section fifty-one of said Act is hereby so amended as to read as follows:

Section Fifty-one. It shall be unlawful for any railroad company in this State to charge more than three cents per mile for each passenger, and five cents per mile for each ton of freight transported on its road; and for every transgression of such limitation the company shall be liable to the party suffering thereby treble the entire amount of fare or freight so charged to such party; *provided*, that in no case shall the company be required to receive less than twenty-five cents for any one lot of freight for any distance.

SEC. 2. This Act shall take effect from and after its passage.

## INDEX TO EXHIBITS.

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### EXHIBIT A.

Comparative statement of actual earnings from passengers.

### EXHIBIT B.

Comparative statement of freight transported.

### EXHIBIT C.

Comparative statements of passenger earnings on New England roads.

### EXHIBIT D.

Comparative statement of rates for freight on merchandise on the Central Pacific Railroad, between Sacramento and all other stations in California, and on the Vermont Central Railroad for same distances.

### EXHIBIT E.

Comparative statement of rates for freight on merchandise on the Central Pacific Railroad to all stations in California, on the Vermont Central Railroad, on the Chicago, Rock Island, and Pacific Railroad, and others, for equal distances.

### EXHIBIT F.

Comparative statement of rates on freights on the Illinois Central, Hamilton and St. Joseph, Chicago and Northwestern, Union Pacific, and Central Pacific Railways.

### EXHIBIT G.

Statement of freight receipts from the following stations in Placer and Nevada Counties, from January to November, eighteen hundred and seventy-one.

### EXHIBIT H.

Statement showing maximum charges for freight per ton per mile on the following railroads, taken from the published tariff books of said roads for year 1869-70.

### EXHIBIT I.

Table of comparative rates, published by *Sacramento Union* of February third, eighteen hundred and seventy-two.

### EXHIBIT K.

Supplemental statement, showing, in last four columns, the rates which the Central Pacific Railroad should charge if value of rolling stock and number of tons per mile, compared with each of the subjoined roads, are considered as base of comparison.

EXHIBIT A.  
Comparative Statement of Actual Earnings from Passengers Carried.

ROAD.	Number miles.....	Rate per mile.. Cents.	Passengers carried during year.....	Number of Passen- gers per mile per year.....	Receipts in Cur- rency for year....	Receipts per mile per year.....	Number of trains run.....	Remarks .....
Buffalo and Erie.....	88	3	476,119	5,410	\$965,302 61	\$10,969 33	10	1867
Erie Railway.....	459	2½	3,275,025	7,135	3,166,877 34	6,899 51	10	1870
Hudson River, New York Central } .....	740	2	7,044,946	9,520	6,738,592 01	9,106 20	12	1870
New York and Flushing.....	8	2½	587,290	73,411	111,180 57	13,897 57	32	1867
New York and Harlem.....	130	2	1,733,627	13,335	1,048,887 19	8,068 36	12	1870
New York and New Haven.....	76	2½	1,965,371	25,860	1,768,900 17	23,275 00	22	1867
Northern, of New Jersey.....	21	3	324,879	15,470	169,351 80	8,064 37	16	1867
Rensselaer and Saratoga.....	181	3 to 4	638,236	3,526	638,655 68	3,528 48	8	1870
Troy and Boston.....	35	3 to 4	231,255	6,607	193,188 65	5,519 67	8	1870
Central Pacific.....	1,027	1½ to 10	666,594	649	3,392,263 19	3,303 08	2	1870

## EXHIBIT B.

*Comparative Statement of Freight Transported.*

ROAD.	Number of miles.....	Number tons of freight carried during year...	Number tons per mile per year.....	Comparative statement of freight carried per mile, with C. P. R. R. and C. P. being a unit	Remarks .....
Buffalo and Erie.....	88	870,582	9,893	24.4 times C. P.	1867
Erie Railway.....	459	4,852,505	10,572	26.1 times C. P.	1870
Hudson River .....	737	4,122,000	5,593	13.8 times C. P.	1870
New York Central.....					
New York and Harlem.....	130	344,528	2,650	6.5 times C. P.	1870
New York and New Haven.....	76	126,549	1,665	4.1 times C. P.	1867
Northern, of New Jersey.....	21	20,240	964	2.3 times C. P.	1867
Rensselaer and Saratoga .....	181	448,132	2,476	6.1 times C. P.	1870
Troy and Boston.....	35	162,204	4,634	11.4 times C. P.	1870
Central Pacific.....	1,027	414,531	404	1.0 times C. P.	



## EXHIBIT C.

*Comparative Statement of Passenger Earnings.*

ROAD.	Miles.	Passengers carried during the year 1870.....	Passengers carried per mile per year.....	Per cent per mile per year.
Boston and Albany.....	241	4,744,904	19,688	.0597
Boston, Clinton, and Fitchburg..	106	1,767,952	16,678	.0506
Boston and Lowell.....	55	293,104	5,329	.0161
Boston and Maine.....	145	3,873,587	26,714	.0811
Boston and Providence.....	44	2,642,903	60,066	.1823
Cheshire .....	114	147,274	1,291	.0039
Connecticut River.....	50	876,481	17,529	.0532
Eastern .....	107	4,610,277	43,086	.1308
Fitchburg.....	50	1,793,222	35,864	.1088
Old Colony .....	122	3,332,750	27,317	.0829
Providence and Worcester.....	43	1,398,891	32,532	.0987
Vermont and Massachusetts.....	86	344,819	4,009	.0121
Boston, Hartford, and Erie.....	79	2,438,378	30,865	.0937
Worcester and Nashua.....	46	356,264	7,744	.0235
Central Pacific.....	1,027	666,594	649	.0019
Total .....	.....	.....	329,361	.9993

## EXHIBIT D.

*Comparative statement of rates for Freight on Merchandise on the Central Pacific Railroad between Sacramento and all other Stations in California, and on the Vermont Central Railroad for the same distances.*

C. P. R. R. BETWEEN SACRAMENTO AND	Distances .....	Rate in cents per one hundred pounds on C. P. R. R.....	Rate in cents per one hundred pounds on V. C. R. R.....	Difference in favor of C. P. R. R. per one hundred pounds .....	Difference in favor of V. C. R. R. per one hundred pounds .....	Distances .....	C. P. R. R. BETWEEN SAN FRANCISCO AND	Rate in cents per one hundred pounds on C. P. R. R.....	Rate in cents per one hundred pounds on V. C. R. R.....	Difference in favor of C. P. R. R. per one hundred pounds .....	Difference in favor of V. C. R. R. per one hundred pounds .....
Brighton.....	5	7	9	2	.....	5	Alameda Wharf.....	7	9	.....	.....
Florin.....	9	7	12	5	.....	8	Alameda .....	7	12	.....	.....
Elk Grove.....	15	9	15	6	.....	20	Hayward's .....	12	20	.....	.....
McConnell's .....	19	9	18	9	.....	3	Oakland Wharf.....	7	9	.....	.....
Galt .....	26	12	22	10	.....	6	Oakland .....	7	12	.....	.....
Mokelumne.....	35	15	26	11	.....	8	Brooklyn .....	7	12	.....	.....
Stockton .....	47	15	30	15	.....	10	Simpson's .....	8	12	.....	.....
Lathrop .....	57	15	34	19	.....	15	San Leandro.....	9	15	.....	.....

64	Murrano	17	36	19	17	Lorenzo	9	18	9	.....
70	Salida	18	39	21	26	Decoto	12	22	10	.....
77	Modesto	20	42	22	30	Niles	12	22	10	.....
91	Turlock	22	48	26	33	Washington	12	24	12	.....
99	Cresey	24	50	26	37	Warm Springs	15	26	11	.....
60	San Joaquin Bridge	15	36	21	41	Milpitas	15	28	13	.....
64	Banta's	15	36	21	48	San José	15	30	15	.....
69	Ellis	15	38	23	36	San José	15	26	11	.....
75	Midway	15	42	27	41	Pleasanton	15	28	13	.....
83	Altamont	15	44	29	47	Livermore	15	30	15	.....
91	Livermore	15	48	33	55	Altamont	15	32	17	.....
97	Pleasanton	16	50	34	63	Midway	15	36	21	.....
102	San José	17	53	36	69	Ellis	15	38	23	.....
108	Niles	17	53	36	74	Banta's	15	39	24	.....
111	Washington	17	55	38	78	San Joaquin Bridge	15	42	27	.....
115	Warm Springs	18	55	37	81	Lathrop	15	44	29	.....
119	Milpitas	18	55	37	88	Murrano	17	46	29	.....
126	San José	18	58	40	94	Salida	18	48	30	.....
112	Decoto	17	55	38	101	Modesto	20	53	33	.....
121	Lorenzo	18	58	40	115	Turlock	22	55	32	.....
123	San Leandro	18	58	40	123	Cresey	24	58	34	.....
128	Simpson's	18	58	40	91	Stockton	15	48	33	.....
130	Brooklyn	18	58	40	103	Mokelumne	17	53	36	.....
132	Oakland	18	60	62	112	Galt	17	55	38	.....
135	Oakland Wharf	18	60	42	119	McConnell's	18	55	37	.....
138	San Francisco	18	60	42	123	Elk Grove	18	58	40	.....
133	Alameda Wharf	18	60	42	129	Florin	18	58	40	.....
138	Hayward's	18	60	42	133	Brighton	18	60	42	.....
8	Arcade	7	12	5	138	Sacramento	18	60	42	.....
15	Antelope	9	15	6	146	Arcade	21	62	41	.....
18	Roseville Junction	9	18	9	156	Roseville Junction	23	65	42	.....

## EXHIBIT D—Continued.

								Difference in favor of V. C. R. R. per one hundred pounds.....	..... ..... ..... ..... ..... ..... ..... .....
								Difference in favor of C. P. R. R. per one hundred pounds.....	40 40 41 43 41 39 41 39 37 37 38 36
								Rate in cents per one hundred pounds on V. C. R. R.....	68 68 71 73 75 77 79 81 81 81 83 85
								Rate in cents per one hundred pounds on C. P. R. R.....	28 28 30 30 34 38 38 42 44 44 45 49
								C. P. R. R. BETWEEN SAN FRANCISCO AND	Lincoln Ewing's Wheatland Marysville Milo Gridley's Bigg's Nelson Durham Roble Chico Nord
								Distances .....	166 170 177 190 200 208 211 221 227 229 234 241
								Difference in favor of V. C. R. R. per one hundred pounds .....	..... ..... ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
								Difference in favor of C. P. R. R. per one hundred pounds.....	8 10 10 10 14 16 16 14 15 16 16 18
								Rate in cents per one hundred pounds on V. C. R. R.....	22 24 26 26 30 32 36 38 39 44 46 48
								Rate in cents per one hundred pounds on C. P. R. R.....	14 14 16 16 16 16 20 24 24 28 30 30
								C. P. R. R. BETWEEN SACRAMENTO AND	Lincoln Ewing's Sheridan Wheatland Reed's Marysville Milo Gridley's Bigg's Nelson Durham Roble
								Distances .....	28 32 36 39 45 52 62 70 73 83 89 91



96	Chico	31	50	19	.....	243	Ceres	49	85	36	.....
99	Shaw's	33	50	17	.....	248	Soto	54	85	31	.....
105	Ceres	35	53	18	.....	253	Vina	58	87	29	.....
110	Soto	40	53	13	.....	260	Sesma	65	87	22	.....
115	Vina	44	55	11	.....	261	Tehama	65	88	23	.....
122	Sesma	51	58	7	.....	272	Red Bluff	70	89	19	.....
123	Tehama	51	58	7	.....	160	Rocklin	26	65	39	.....
134	Red Bluff	56	60	4	.....	163	Pino	26	68	42	.....
22	Rocklin	12	20	8	.....	166	Penryn	29	68	39	.....
25	Pino	12	20	8	.....	169	Newcastle	29	68	39	.....
28	Penryn	15	22	7	.....	174	Auburn	32	71	39	.....
31	Newcastle	15	24	9	.....	181	Clipper Gap	38	73	35	.....
36	Auburn	18	26	8	.....	187	New England Mills	40	73	33	.....
43	Clipper Gap	24	28	4	.....	192	Colfax	41	75	34	.....
49	New England Mills	26	30	4	.....	202	Gold Run	49	77	28	.....
54	Colfax	27	32	5	.....	205	Dutch Flat	51	77	26	.....
64	Gold Run	35	36	1	.....	207	Alta	52	77	25	.....
67	Dutch Flat	37	38	1	.....	211	Shady Run	55	79	24	.....
69	Alta	38	38	.....	.....	216	Blue Cañon	59	79	20	.....
73	Shady Run	41	39	.....	2	222	Emigrant Gap	64	81	17	.....
78	Blue Cañon	45	42	.....	3	230	Cisco	70	81	11	.....
84	Emigrant Gap	50	44	.....	6	237	Cascade	75	83	8	.....
92	Cisco	56	48	.....	8	240	Summit Valley	77	83	6	.....
99	Cascade	61	50	.....	11	243	Summit	79	85	6	.....
102	Summit Valley	63	53	.....	10	258	Truckee	91	87	4	.....
105	Summit	65	53	.....	12	266	Boca	95	88	7	.....
120	Truckee	77	55	.....	22	276	State Line	100	89	11	.....
128	Boca	81	58	.....	23	.....	.....	.....	.....	.....	.....
138	State Line	86	60	.....	26	.....	.....	.....	.....	.....	.....

## EXHIBIT E.

*Comparative statement of rates for Freight on Merchandise on the Central Pacific Railroad to all stations in California, on the Vermont Central Railroad, on the Chicago, Rock Island, and Pacific Railroad, and others, for equal Distances.*

DISTANCE .....	CENTRAL PACIFIC RAILROAD. From Sacramento to—	Rate in Cents per 100 pounds on Central Pacific Railroad.....	Rate in Cents per 100 pounds on Ver- mont C. R. R.....	Rate in Cents per 100 pounds on Chicgo, R. I. & P. R. R.....	Rate in Cents per 100 pounds on North Missouri Railroad..	Rate in Cents per 100 pounds on Ohio & Miss. R. R.....	Rate in Cents per 100 pounds on Kansas Pacific Railroad.....
5	Brighton .....	7	9	24	16	22	10
9	Florin .....	7	12	27	18	22	10
15	Elk Grove .....	9	15	30	21	25	13
19	McConnell's .....	9	18	32	24	25	16
26	Galt .....	12	22	36	29	26	21
35	Mokelumne .....	15	26	38	31	31	24
47	Stockton .....	15	30	44	38	35	33
57	Lathrop .....	15	34	48	42	39	38
64	Murrano, .....	17	36	50	44	39	41
70	Salida, .....	18	39	52	46	40	44
77	Modesto, .....	20	42	56	49	41	49
91	Turlock, .....	22	48	63	53	48	57
99	Cresey, .....	24	50	65	55	49	60
60	San Joaquin Bridge.....	15	36	48	42	39	41
64	Banta's.....	15	36	50	44	39	41
69	Ellis .....	15	38	52	46	40	44
75	Midway.....	15	42	54	48	41	46
83	Altamont.....	15	44	58	50	41	52
91	Livermore .....	15	48	63	53	48	57
97	Pleasanton .....	16	50	65	55	49	60
102	Sunol .....	17	53	68	57	49	63
108	Niles .....	17	53	68	59	53	66
111	Washington, .....	17	55	70	60	55	69
115	Warm Sp'gs, .....	18	55	70	60	55	69
119	Milpitas, .....	18	55	70	61	56	71
126	San José, .....	18	58	73	64	56	77
112	Decoto.....	17	55	70	60	55	69
121	Lorenzo .....	18	58	73	62	56	74
123	San Leandro.....	18	58	73	62	56	74
128	Simpson's.....	18	58	73	64	58	77
130	Brooklyn .....	18	58	73	64	58	77
132	Oakland .....	18	60	75	66	58	81
135	Oakland Wharf.....	18	60	75	66	58	81
138	San Francisco.....	18	60	75	67	58	85
133	Alameda Wharf.....	18	60	75	66	58	81
138	Hayward's .....	18	60	75	67	58	85
8	Arcade .....	7	12	27	18	22	10
15	Antelope .....	9	15	30	21	25	13
18	Roseville Junction.....	9	18	32	24	25	16

Central Pacific Railroad.

Vermont Central Railroad.

Chicago, Rock Island, and Pacific Railroad.

North Missouri Railroad.

Ohio and Mississippi Railroad.

Kansas Pacific Railroad.

## EXHIBIT E.

Comparative statement of rates of freight, etc.—continued.

DISTANCE .....	CENTRAL PACIFIC RAILROAD. From Sacramento to—	Rate in Cents per 100 pounds on Central Pacific Railroad.....	Rate in Cents per 100 pounds on Ver- mont Cent. R. R....	Rate in Cents per 100 pounds on Chic'go, R. I., and P. R. R.	Rate in Cents per 100 pounds on North Missouri R. R.....	Rate in Cents per 100 pounds on the Ohio and Miss. R. R.....	Rate in Cents per 100 pounds on Kansas Pacific Railroad.....
28	Lincoln ...	14	22	36	29	27	21
32	Ewing's ...	14	24	38	31	31	24
36	Sheridan ..	16	26	40	34	31	27
39	Wheatland	16	26	40	34	31	27
45	Reed's .....	16	30	42	36	35	30
52	Marysville	16	32	46	40	36	35
62	Milo .....	20	36	50	44	39	41
70	Gridley's...	24	38	52	46	40	44
73	Biggs'.....	24	39	54	48	41	46
83	Nelson .....	28	44	58	50	41	52
89	Durham...	30	46	60	51	48	55
91	Roble.....	30	48	63	53	48	57
96	Chico.....	31	58	65	55	49	60
99	Shaw's .....	33	50	65	55	49	60
105	Ceres .....	35	53	68	57	53	63
110	Soto .....	40	53	68	59	55	66
115	Vina .....	44	55	70	60	55	69
122	Sesma ....	51	58	73	62	56	74
123	Tehama....	51	58	73	62	56	74
134	Red Bluff..	56	60	75	66	58	81
22	Rocklin .....	12	20	34	27	25	18
25	Pino.....	12	20	34	27	26	18
28	Penryn .....	15	22	36	29	27	21
31	Newcastle .....	15	24	38	31	31	24
36	Auburn .....	18	26	40	34	31	27
43	Clipper Gap .....	24	28	42	36	33	30
49	New England Mills .....	26	30	44	38	36	33
54	Colfax.....	27	32	46	40	38	35
64	Gold Run .....	35	36	50	44	39	41
67	Dutch Flat.....	37	38	52	46	40	44
69	Alta .....	38	38	52	46	40	44
73	Shady Run.....	41	39	54	48	41	46
78	Blue Cañon .....	45	42	56	49	41	49
84	Emigrant Gap.....	50	44	58	50	41	52
92	Cisco .....	56	48	63	53	48	57
99	Cascade .....	61	50	65	55	49	60
102	Summit Valley.....	63	53	68	57	49	63
105	Summit .....	65	53	68	57	53	63
120	Truckee .....	77	55	70	61	56	71
128	Boca .....	81	58	73	64	58	77
138	State Line .....	86	60	75	67	58	85

Oregon Division.

## EXHIBIT E.

*Comparative statement of rates of freight, etc.—continued.*

DISTANCE.....	CENTRAL PACIFIC RAILROAD. From San Francisco to—	Rate in Cents per 100 pounds on Central Pacific Railroad.....	Rate in Cents per 100 pounds on Ver- mont Cent. R. R....	Rate in Cents per 100 pounds on Chic'go, R. I., and P. R. R....	Rate in Cents per 100 pounds on North Missouri Railroad..	Rate in Cents per 100 pounds on Ohio and Miss. R. R.....	Rate in Cents per 100 pounds on Kansas Pacific Railroad.....
5	Alameda Wharf.....	7	9	24	16	22	10
8	Alameda .....	9	12	27	18	22	10
20	Hayward's.....	12	20	32	24	25	16
3	Oakland Wharf.....	7	9	20	16	22	10
6	Oakland.....	7	12	27	18	22	10
8	Brooklyn .....	7	12	27	18	22	10
10	Simpson's.....	8	12	27	18	25	10
15	San Leandro .....	9	15	30	21	25	13
17	Lorenzo .....	9	18	32	24	25	16
26	Decoto .....	12	22	36	29	26	21
30	Niles .....	12	22	36	29	27	21
33	Washington... }	12	24	38	31	31	24
37	Warm Springs } S. José	15	26	40	34	31	27
41	Milpitas ..... } Branch.	15	28	42	36	33	30
48	San José ..... }	15	30	44	38	36	33
36	Suñol .....	15	26	40	34	31	27
41	Pleasanton.....	15	28	42	36	33	30
47	Livermore .....	15	30	44	38	35	33
55	Altamont .....	15	32	46	40	38	35
63	Midway .....	15	36	50	44	39	41
69	Ellis.....	15	38	52	46	40	44
74	Banta's .....	15	39	54	48	41	46
78	San Joaquin Bridge.....	15	42	56	49	41	49
81	Lathrop .....	15	44	58	50	41	52
88	Murrano .....	17	46	60	51	48	55
94	Salida .....	18	48	63	53	48	57
101	Modesto .....	20	53	68	57	49	63
115	Turlock .....	22	55	70	60	55	69
123	Cresey.....	24	58	73	62	56	74
91	Stockton.....	15	48	63	53	48	57
103	Mokelumne .....	17	53	68	57	53	63
112	Galt.....	17	55	70	60	55	69
119	McConnell's .....	18	55	70	61	56	71
123	Elk Grove .....	18	58	73	62	56	74
129	Florin .....	18	58	73	64	58	77
133	Brighton.....	18	60	75	66	58	81
138	Sacramento .....	18	60	75	67	58	85
146	Arcade .....	21	62	77	69	60	93
156	Roseville Junction .....	23	65	79	70	65	95



## EXHIBIT E.

Comparative statement of rates of freight, etc.—concluded.

DISTANCE .....	CENTRAL PACIFIC RAILROAD. From San Francisco to—	Rate in Cents per 100 pounds on Central Pacific Railroad.....	Rate in Cents per 100 pounds on Ver- mont Cent. R. R.....	Rate in Cents per 100 pounds on Chic'go, R. I., and P. R. R.....	Rate in Cents per 100 pounds on North Missouri R. R.....	Rate in Cents per 100 pounds on the Ohio and Miss. R. R.....	Rate in Cents per 100 pounds on Kansas Pacific Railroad.....
166	Lincoln .....	28	68	81	70	65	99
170	Ewing's .....	28	68	81	70	66	99
177	Wheatland .....	30	71	83	71	66	105
190	Marysville .....	30	73	85	72	66	110
200	Milo .....	34	75	87	73	70	116
208	Gridley's.....	38	77	89	74	73	122
211	Biggs' .....	38	79	91	74	75	124
221	Nelson .....	42	81	93	75	78	130
227	Durham .....	44	81	93	76	86	133
229	Roble .....	44	81	93	76	86	133
234	Chico .....	45	83	95	76	88	136
241	Nord .....	49	85	98	77	89	141
243	Ceres .....	49	85	98	77	90	141
248	Soto .....	54	85	98	78	90	144
253	Vina .....	58	87	100	78	90	147
260	Sesma .....	65	87	100	79	91	150
261	Tehama .....	65	88	103	79	91	153
272	Red Bluff.....	70	89	105	80	91	159
160	Rocklin .....	26	65	79	70	65	95
163	Pino.....	26	68	81	70	65	96
166	Penryn .....	29	68	81	70	65	99
169	Newcastle .....	29	68	81	70	66	99
174	Auburn .....	32	71	83	71	66	102
181	Clipper Gap .....	38	73	85	71	66	108
187	New England Mills .....	40	73	85	72	66	110
192	Colfax.....	41	75	87	72	70	113
202	Gold Run .....	49	77	89	73	73	119
205	Dutch Flat.....	51	77	89	73	73	119
207	Alta.....	52	77	89	74	73	122
211	Shady Run.....	55	79	91	74	75	124
216	Blue Cañon.....	59	79	91	75	78	127
222	Emigrant Gap .....	64	81	93	75	78	130
230	Cisco .....	70	81	93	76	88	133
237	Cascade .....	75	83	95	77	89	139
240	Summit Valley .....	77	83	95	77	89	139
243	Summit .....	79	85	98	77	90	141
258	Truckee .....	91	87	100	79	91	150
266	Boca .....	95	88	103	80	91	156
276	State Line .....	100	89	105	.....	91	161

## EXHIBIT F.

Comparative Statement of rates on Freight on the Illinois Central, Hannibal and St. Joseph, Chicago and Northwestern, Union Pacific, and Central Pacific Railways.

		RATES ON MERCHANDISE.											
FROM	TO	Illinois Central Railroad.			Hannibal & St. Joseph Railroad.			Chicago & Northwestern Railroad.			Union Pacific Railroad.		
		Miles.....	Per 100 lbs. per dist'nce..	Per ton per mile.....	Miles.....	Per 100 lbs. per dist'nce..	Per ton per mile.....	Miles.....	Per 100 lbs. per dist'nce..	Per ton per mile.....	Miles.....	Per 100 lbs. per dist'nce..	Per ton per mile.....
Chicago.....	Calumet.....	15	22	30									
Quincy.....	Palmyra.....				15	20	26½						
Clinton.....	Malone.....							14	7	24			
Omaha.....	Papillion.....										15	11	15
<i>San Francisco</i> .....	<i>San Leandro</i> .....												
Chicago.....	Mattison.....	28	27	20	24	26	22	25	23	18	29	17	12
Quincy.....	Bear Creek.....												
Clinton.....	Grand Mound.....												
Omaha.....	Elkhorn.....												
<i>San Francisco</i> .....	<i>Decoto</i> .....												
Chicago.....	Manteno.....	47	38	16	47	35	15						
Quincy.....	Shelbina.....							47	35	15	46	23	10
Clinton.....	Clarence.....												
Omaha.....	Fremont.....												
<i>San Francisco</i> .....	<i>Livermore</i> .....												
Chicago.....	Bulkeley's.....	93	60	13							47	15	7
Quincy.....	New Cambria.....				86	50	12						
Clinton.....	Fairfax.....							90	50	11			
Omaha.....	Columbus.....										92	41	9
<i>San Francisco</i> .....	<i>Stockton</i> .....												
Chicago.....	Ludlow.....	108	63	11									
Quincy.....	Laclede.....				109	58	11						
Clinton.....	Luzerne.....							111	56	10			







Omaha.....	137	20	3	135	30	5	139	27	4	109	30	6	112	16	3
<i>San Francisco</i> .....															
Chicago.....															
Quincy.....															
Clinton.....															
Omaha.....															
<i>San Francisco</i> .....															
Chicago.....	158	21	3										138	18	2
Quincy.....															
Clinton.....															
Omaha.....															
<i>San Francisco</i> .....															
Chicago.....	172	23	3										136	23	3
Quincy.....															
Clinton.....															
Omaha.....															
<i>San Francisco</i> .....															
Chicago.....	191	26	3										174	28	3
Quincy.....															
Clinton.....															
Omaha.....															
<i>San Francisco</i> .....															
Chicago.....	206	28	3										192	36	4
Quincy.....															
Clinton.....															
Omaha.....															
<i>San Francisco</i> .....															
Chicago.....	273	30	2										205	46	4
Quincy.....															
Clinton.....															
Omaha.....															
<i>San Francisco</i> .....															
<i>Sacramento</i> .....													276	94	7
													28	11	8
													45	12	5
													91	18	4
													110	22	4
													134	25	4
													166	21	4
													174	22	2½
													190	22	2½
													208	26	2½
													234	28	2½
													272	30	2

## Oregon Branch.

Reed's,  
 Roble,  
 Soto,  
 Red Bluff,  
 Lincoln,  
 Sheridan,  
 Marysville,  
 Gridley's,  
 Chico,  
 Red Bluff.

*San Francisco*.....

## EXHIBIT F—Continued.

RATES ON SALT, CEMENT, ETC.																			
		Illinois Central Railroad.			Hannibal & St. Joseph Railroad.			Chicago & North-western Railroad.			Union Pacific Railroad.			Central Pacific Railroad.					
FROM	TO	Miles .....			Per 100 lbs. per dist.....			Per ton per mile .....			Miles .....			Per 100 lbs. per dist.....			Per ton per mile.....		
		Miles .....	Per 100 lbs. per dist.....	Per ton per mile.	Miles .....	Per 100 lbs. per dist.....	Per ton per mile .....	Miles .....	Per 100 lbs. per dist.....	Per ton per mile .....	Miles .....	Per 100 lbs. per dist.....	Per ton per mile .....	Miles .....	Per 100 lbs. per dist.....	Per ton per mile.....			
Chicago .....	Calumet.....	15	8	11															
Quincy .....	Palmyra .....				15	9	12												
Clinton .....	Malone.....							14	7	10									
Omaha .....	Papillon .....																		
San Francisco.....	San Leandro.....																		
Chicago .....	Matteson .....	28	11	8							15	7	9		15	6 8			
Quincy .....	Bear Creek.....				24	10½	9												
Clinton .....	Grand Mound.....																		
Omaha .....	Elkhorn.....							25	9½	8									
San Francisco.....	Decoto .....																		
Chicago .....	Manteno.....	47	14½	6											26	6			
Quincy .....	Shelbina .....				47	15	7												
Clinton .....	Clarence .....							47	13½	6									
Omaha .....	Fremont.....																		
San Francisco.....	Libermore.....																		
Chicago .....	Bulkeley's.....	93	20	4															
Quincy .....	New Cambria .....				86	20½	5								47	4			
Clinton .....	Fairfax .....							90	17	4									
Omaha .....	Columbus .....																		
San Francisco.....	Stockton.....																		
Chicago .....	Ludlow .....	108	22	4											91	3			
Quincy .....	Laclede .....				109	25½	5												
Clinton .....	Luzerne.....							111	18	3									







[illegible]

## EXHIBIT F—Continued.

MACHINERY, AGRICULTURAL IMPLEMENTS, ETC.																
FROM	TO	Illinois Central Railroad.			Hannibal and St. Joseph Railroad.			Chicago and North-western Railroad.			Union Pacific Railroad.			Central Pacific Railroad.		
		Miles .....	Per 100 lbs per dist'nce..	Per ton per mile .....	Miles .....	Per 100 lbs per dist'nce..	Per ton per mile .....	Miles .....	Per 100 lbs per dist'nce..	Per ton per mile .....	Miles .....	Per 100 lbs per dist'nce..	Per ton per mile .....	Miles .....	Per 100 lbs per dist'nce..	Per ton per mile .....
Chicago	Calumet.....	15	7½	10	15	10	13	14	6½	9	15	8	11	15	7	9
Quincy.....	Palmyra.....															
Clinton.....	Malone.....															
Omaha.....	Papillion.....															
San Francisco.....	San Leandro.....															
Chicago.....	Matteson.....	28	9½	7												
Quincy.....	Bear Creek.....				24	11½	10	25	8	6						
Clinton.....	Grand Mound.....										29	10	7			
Omaha.....	Elkhorn.....													26	8½	6
San Francisco.....	Decoto.....															
Chicago.....	Manfeno.....	47	12½	5	47	16	7									
Quincy.....	Shelbina.....															
Clinton.....	Clarance.....							47	12½	5	46	15	7			
Omaha.....	Fremont.....															
San Francisco.....	Livermore.....															
Chicago.....	Bulkley's.....	93	19	4	86	21½	5	90	18½	4				47	10½	5
Quincy.....	New Cambria.....															
Clinton.....	Farfax.....															
Omaha.....	Columbus.....															
San Francisco.....	Stockton.....															
Chicago.....	Ludlow.....	108	22	4	109	27	5							91	15	3
Quincy.....	Laclede.....															
Clinton.....	Luzerne.....							111	21½	4						









## EXHIBIT F—Concluded.

BRICK, STONE, WOOD, ETC.																
		Illinois Central Railroad.			Hannibal & St. Joseph Railroad.			Chicago & North-western Railroad.			Union Pacific Railroad.			Central Pacific Railroad.		
FROM	TO	Miles.....	Per 100 lbs. per dist'n'ce..	Per ton per mile.....	Miles.....	Per 100 lbs. per dist'n'ce..	Per ton per mile.....	Miles.....	Per 100 lbs. per dist'n'ce..	Per ton per mile.....	Miles.....	Per 100 lbs. per dist'n'ce..	Per ton per mile.....	Miles.....	Per 100 lbs. per dist'n'ce..	Per ton per Mile.....
Chicago.....	Calumet.....	15	4	5½	15	8½	11	14	4½	9	15	6	8	15	4½	6
Quincy.....	Palmyra.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clinton.....	Malone.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Omaha.....	Papillion.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<i>San Francisco</i> .....	<i>San Leandro</i> .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago.....	Matison.....	28	5	4	24	9½	8	25	6	5	29	8	6	.....	.....	.....
Quincy.....	Bear Creek.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clinton.....	Grand Mound.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Omaha.....	Elkhorn.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<i>San Francisco</i> .....	<i>Decoto</i> .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago.....	Manteno.....	47	7½	3	47	12	5	47	10	4	46	12	4	47	7½	3
Quincy.....	Shelbina.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clinton.....	Clarance.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Omaha.....	Fremont.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<i>San Francisco</i> .....	<i>Livermore</i> .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago.....	Budley's.....	93	10	2¼	86	16	4	90	16	3½	.....	.....	.....	.....	.....	.....
Quincy.....	New Cambria.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clinton.....	Fairfax.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Omaha.....	Columbus.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<i>San Francisco</i> .....	<i>Stockton</i> .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago.....	Ludlow.....	108	10½	2¼	109	18½	3	111	19	3½	.....	.....	.....	91	11½	2½
Quincy.....	Laclede.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clinton.....	Luzerne.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....



## EXHIBIT G.

Statement of Freight Receipts from the following Stations in Placer and Nevada Counties, from January to November, 1871.

MONTHS.	Newcastle .....	Auburn .....	Colfax .....	Gold Run.....	Dutch Flat.....	Alta.....	Blue Cañon.....	Emigrant Gap..	Cisco .....	Summit .....	Truckee.....	Boca .....	Total amount...
January .....	\$331 50	\$1,308 50	\$3,819 00	\$240 00	\$651 50	\$631 50	\$49 00	\$23 50	\$37 00	\$37 50	\$2,731 00	\$822 25	\$11,092 25
February..	322 75	1,104 00	2,075 30	241 50	800 25	160 25	45 00	11 25	47 25	38 50	5,877 00	110 75	11,493 80
March .....	350 50	1,546 25	4,427 25	309 50	825 25	653 00	51 00	18 00	45 75	79 50	5,753 00	159 75	14,218 75
April .....	409 75	1,505 00	4,405 50	314 25	1,024 50	983 25	57 50	32 25	48 50	27 75	4,800 91	296 10	14,005 26
May .....	579 25	2,237 25	5,070 00	368 50	1,406 00	966 34	156 75	392 00	149 11	110 47	5,953 48	240 25	18,219 40
June .....	387 15	2,030 75	5,149 75	483 50	1,159 75	1,468 56	124 50	729 80	248 21	116 38	8,322 79	335 78	20,766 92
July .....	1,012 50	2,143 25	5,419 51	329 25	1,083 50	1,318 09	154 25	744 55	246 46	216 40	8,956 24	872 50	22,499 45
August .....	726 25	2,437 64	5,753 25	439 25	1,221 75	1,022 57	179 34	549 97	114 18	633 15	8,879 11	2,801 00	24,890 46
September .....	720 06	2,637 86	5,801 14	541 00	1,463 05	1,221 89	165 50	1,237 54	170 20	556 00	7,698 53	433 75	22,434 80
October .....	946 00	3,046 50	6,825 25	650 00	1,522 00	1,401 92	383 75	623 07	140 96	148 23	7,726 38	493 75	25,527 81
November.....	1,234 50	3,205 50	6,087 00	381 00	1,336 25	1,002 01	284 92	941 04	226 55	273 78	4,709 19	515 00	20,186 74
Totals.....	\$7,230 21	\$23,532 00	\$56,032 95	\$4,827 70	\$12,523 40	\$10,569 38	\$1,601 51	\$5,292 97	\$1,474 26	\$2,300 75	\$71,407 63	\$6,379 88	\$203,495 64

Placer County..... \$122,747 38.  
Nevada County..... 80,748 26.



## EXHIBIT H.

*Statement showing "Maximum" Charge for Freight per on per mile on following Railroads, taken from the published Tariff Books of said Companies for Years 1869-1870.*

NAME OF ROAD.	For more than five and less than fifteen miles .....	For more than fifteen and less than thirty miles.....	For more than thirty and less than fifty miles.....	For more than fifty and less than one hundred miles.....	For length between one hundred and two hundred miles.
	Cents.	Cents.	Cents.	Cents.	Cents.
Union Pacific .....	24	13.84	12.17	11.29	7.75
Lake Shore and Michigan Southern	24	12.80	10.63	8.48	.....
Erie.....	35	13.33	10	8.43	4.34
Ohio and Mississippi .....	32	15.20	12	9.85	5.64
Illinois Central.....	36	24	17.33	13.33	10.76
Vermont Central .....	33.33	11.85	10.23	9.35	5.42
Burlington and Missouri River.....	33.33	17.85	16.66	11.64	7.82
Chicago and Alton.....	23.33	16	14.05	10.21	.....
St. Louis, Vandalia, T. N. & Ind's ..	60	20.08	13.59	10½	5.79
Michigan Central.....	26	14.78	11.05	8.54	.....
Little Miami & Columbus & Xenia..	26	20	8	6.24	4.91
Kansas City, St. Joe & Council Bluffs	45.71	24.80	20.97	14	10.54
Oregon and California .....	28.57	16.42	14.09	12.17	12.19
Columbus and Hocking Valley.....	22.22	13.91	10	8.33	7.36
St. Louis and South Eastern.....	34.28	13.60	13.72	10.52	10.52
Indianapolis, Bloomington & West'n.	37.77	20	15	9.41	6.60

## EXHIBIT I.

Table of comparative rates, published by the "Sacramento Union," February 3d, 1872.

NAME OF RAILROAD.	Miles of track.....	Total amount of stock and debt.....	Total amount of stock and debt per mile of road....	Earnings from transportation of passengers.....	Earnings from transportation of freight.....	Earnings from all other sources .....	Total earnings for year.....	Total operating expenses...
Atlantic and Great Western Railroad...	507	\$59,999,900 00	\$140,844 83	\$1,039,551 61	\$3,318,902 29	\$75,647 00	\$ 4,434,100 90	\$3,655,233 08
Central Ohio Div. Baltimore & O. R. R.	163	5,500,000 00	40,145 98	283,094 14	485,153 76	67,512 60	835,760 50	801,022 02
Cleveland, Col's, Cin. & Indianap's R.R.	391	14,650,000 00	37,391 30	853,813 20	2,164,660 45	213,635 99	3,232,109 64	2,173,650 29
Cleveland and Pittsburgh Railroad.....	225	11,274,275 00	56,354 15	618,065 47	1,784,241 86	100,065 85	2,512,373 18	1,477,767 14
Lake Shore and Michigan South'n R. R.	942	57,829,507 56	61,380 15	4,223,999 96	8,097,145 45	667,479 12	12,988,324 53	7,996,249 15
Marietta and Cincinnati Railroad .....	316	22,616,982 62	81,708 15	393,163 86	923,473 61	65,298 62	1,381,936 09	1,382,093 89
Pittsburg, Fort Wayne & Chicago R. R.	503	33,995,515 33	71,312 22	2,619,218 03	4,697,551 49	332,743 74	7,649,513 26	4,325,906 61
Cincinnati, Hamilton & Dayton R. R.*	176	5,532,000 00	92,200 00	420,430 30	506,645 51	207,999 10	1,195,074 96	648,273 67

\* Sixty miles; has three rails.



## EXHIBIT I—(Continued.)

NAME OF RAILROAD.	Miles of track.....	Total amount of capital stock paid in.....	Total amount of floating and funded debt	Earnings from transportation of passengers .....	Earnings from transportation of freight...	Earnings from other sources .....	Total earnings.....	Paid for transportation expenses.....
	No.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
Buffalo and Erie Railroad.....	88	6,000,000 00	4,000,000 00	.....	.....	.....	2,222,804 73	1,676,164 72
Erie Railroad.....	459	78,536,910 00	23,398,800 00	3,429,629 18	13,046,803 76	245,067 40	16,721,500 34	13,718,085 34
Hudson River Railroad.....	144	16,020,800 00	4,310,387 00	2,269,938 07	3,008,804 33	605,715 54	6,484,457 94	3,770,967 51
New York Central Railroad.....	593	28,795,000 00	11,398,425 87	4,228,470 24	10,457,581 89	900,564 26	15,586,616 39	9,055,485 18
Ogdensburg and Lake Champlain R.R.	118	3,049,100 00	626,900 00	171,845 14	859,019 01	22,139 25	1,053,003 40	704,312 26
Rensselaer and Saratoga Railroad.....	181	3,000,000 00	1,500,000 00	.....	.....	.....	.....	.....
Rome, Watertown and Ogdensburg R.	189	2,976,400 00	1,517,926 33	469,059 26	651,348 04	100,141 10	1,220,548 40	760,977 85
Syracuse, Binghamton and N. Y. R.R.	81	1,470,130 00	1,717,962 09	174,886 29	320,920 39	24,000 00	519,306 68	386,742 66

That portion of the Atlantic and Great Western in the State of Pennsylvania charges as follows: First-class passengers, through, 2.72 cents; first-class passengers, way, 3.25; second-class passengers, way, 2.16; emigrant, through, 1; rate per ton per mile, through freight, 3.11; local freight, 4.53; local coal, 2.66.



NAME OF RAILROAD.	RATES OF FARES PER MILE CHARGED PASSENGERS.				Average per ton per mile.	Per cent of transportation ex- penses on gross earnings.	
	First-class.		Second-class.			Cost of transporting....	Per ct.
	Through .....	Way.....	Through .....	Way.....			
	Cts.	Cts.	Cts.	Cts.	Received for trans- porting .....	Cts.	
Buffalo and Erie Railroad.....	2.50	3.	1.80	.....	2.83	1.58	68.73
Erie Railroad.....	2.05	2.73	.....	1.47	1.60	1.17	79.29
Hudson River Railroad.....	2.12	2 to 2½	.....	1.22	3.14	1.91	58.15
New York Central Railroad.....	2.	2.	.....	1.25	2.21	1.30	58.09
Ogdensburg and Lake Champlain Railroad.....	1½ to 2½	3 to 4	.....	1.	2.78	1.93	66.88
Rensselaer and Saratoga Railroad.....	3 to 4	3 to 4	.....	.....	2.81	2.06	67.67
Rome, Watertown and Ogdensburg Railroad.....	2 to 3	3.50	2 to 3	.....	3.70	2.84	62.35
Syracuse, Binghamton and New York Railroad.....	2.	3.	.....	.70	1.92	1.50	74.47

## EXHIBIT I—(Continued).

NAME OF RAILROAD	Miles of road.....	No.	Fare from station to station, through the whole length of the several roads, single ticket.....	Dollars.	Rate per mile.....	Through tickets.....	Rate per ton per mile, cents and decimal of a cent.....
New Haven, Middleton and Willamantic Railroad.....	22 $\frac{1}{2}$		0 95	4.22	4.00	8.88	
New York and New Haven Railroad (in Connecticut).....	47		2 20	4.68	3.29	4.60	
Naugatuck Railroad.....	62		3 40	5.48	3.22	For coal, 4.43, 7.95	
Norwich and Worcester Railroad.....	60 $\frac{1}{4}$		2 85	4.73	3.32	.....	
New Haven and Northampton Railroad.....	59 $\frac{3}{4}$		2 40	4.00	3.17	3 $\frac{1}{16}$ for coal 4.70	
Hartford and New Haven Railroad.....	62		3 40	5.48	3.22	5.32	

## EXHIBIT I—(Continued).

NAME OF RAILROAD.	Miles of track.....	Rates of passenger fare.			Cost per passenger per mile...		Rates per ton per mile.			Cost per ton per mile—proximate average.....	
		First Class, through.....	First Class, way.....	Second Class, through.....	Cts.	Cts.	Through freight	Local freight.	Cts.	Cts.	Cts.
Pennsylvania Railroad (double track).....	706	3.00	3.00	1 $\frac{3}{4}$	2.567	1.906	1.906	1.906	1.225	1.906	1.225
Philadelphia and Reading Railroad (double track).....	806	3.21	3.21	2.78	1.90	1.53	1.53	2.84	1.57	2.84	1.57
Phila. and Balt. R. R. (length of road said to be 39 miles)...	90	3 $\frac{1}{4}$	4.00	.....	.....	.....	.....	3 $\frac{1}{2}$	.....	3 $\frac{1}{2}$	.....
Lehigh and Susquehanna Railroad.....	121	3.00	3.00	.....	.....	3, coal, 1 $\frac{1}{4}$	3, coal, 1 $\frac{1}{4}$	3.	.....	3.	.....
Lehigh Valley Railroad.....	382	3 $\frac{1}{2}$	3 $\frac{1}{2}$	.....	.....	(Average	(Average	2.62, coal, 3 $\frac{3}{4}$ )	.....	2.62, coal, 3 $\frac{3}{4}$ )	.....
Philadelphia, Wilmington and Baltimore Railroad.....	201	3.00	3 $\frac{1}{4}$	2.00	.....	3.00	3.00	4.	.....	4.	.....
Philadelphia-Erie Railroad.....	362	.....	.....	3 $\frac{1}{2}$	.....	1.609	1.609	1.609	.....	1.609	.....

# EXHIBIT I—(Continued.)

## CENTRAL PACIFIC RAILROAD OF CALIFORNIA FOR THE YEAR 1870.

Miles in Operation in Year 1870.....	Received from Pas- sengers.....	Rec'd from Freight...	Received from other sources .....	Total Earnings.....	Operating Expenses, including Trains...	Net Earnings.....
From 742 to 900	\$4,044,392 05	\$3,508,892 09	\$367,446 84	\$7,920,710 98	\$4,060,564 95	\$3,860,146 03
<p>Received from United States Government, subsidy for seven and eighteen one hundredths miles, from Sacramento to Arcade Creek.  Received from United States Government, subsidy for one hundred and fifty miles, through Sierra Nevada.....  Received from United States Government, subsidy for balance .....</p>						
<p>Received from State of California.....  Received from Placer County.....  Received from Sacramento County.....  Capital stock paid in.....  Funded debt issued.....  Land grant bonds.....  Total cash subsidy received from United States Government in six per cent bonds.....</p>						
<p>\$16,000 per mile  48,000 per mile  32,000 per mile  1,500,000  250,000  300,000  54,001,960  31,488,000  10,000,000  29,851,000</p>						

The States through which these railroads or branches owned and operated by them pass: Connecticut, Massachusetts, New York, New Jersey, Pennsylvania, Ohio, Maryland, Indiana, Illinois, Michigan.  
The number of miles of railroad owned or operated by the companies in this table is over twelve thousand.  
Received from United States Government subsidy for twelve thousand eight hundred acres per mile.



## EXHIBIT K.

*Supplemental statement, showing in last four columns the rates which the Central Pacific Railroad should charge if value of rolling stock and number of tons per mile, compared with each of subjoined roads, are considered as base of comparison.*

NAME OF RAILROAD.	Miles.....	Total number of passengers carried.....	Total number tons of freight carried.....	Total per mile number of passengers.....	Total per mile tons of freight .....	Highest passenger fare, per Exhibit I.....	Highest freight charges, per Exhibit I.....
						Cents.	Cents.
Atlantic and Great Western.....	507	1,205,651	2,143,724	2,378	4,228	5	26.60
Central Ohio Division of Baltimore and Ohio.....	163	212,470	211,305	1,303	1,296	5	12
Cleveland, Columbus, Cincinnati and Indianapolis.....	391	583,694	831,644	1,492	1,492	3½	5½
Cleveland and Pittsburg.....	225	634,047	1,147,448	2,818	5,099	5	26
Lake Shore and Michigan Southern.....	942	2,244,698	3,016,346	2,382	3,202	6¾	16
Marquette and Cincinnati.....	316	339,245	394,343	1,073	3,146	20	10
Pittsburg, Fort Wayne, and Chicago.....	503	1,857,949	1,628,316	3,693	3,237	5	9
Cincinnati, Hamilton, and Dayton.....	176	735,017	419,350	4,176	2,382	30	20
Central Pacific.....	1,027	666,594	414,531	649	403	10	15

## EXHIBIT K—(Continued.)

NAME OF RAILROAD.	Total number of engines.....	Total number of passenger cars...	Total number of freight cars.....	Number of passengers handled per car.....	Tons of freight handled per car.	Value of passenger cars compared to Central Pacific, as one to.....	Value of freight cars compared to Central Pacific, as one to...
Atlantic and Great Western.....	166	80	3,475	15,070	616	4.4	4.7
Central Ohio Division of Baltimore and Ohio.....	43	26	676	8,171	311	2.4	2.4
Cleveland, Columbus, Cincinnati, and Indianapolis....	87	47	1,455	12,376	571	3.6	4.4
Cleveland and Pittsburgh.....	78	39	1,601	12,257	716	3.6	5.5
Lake Shore and Michigan Southern.....	274	187	5,551	12,003	543	3.5	4.2
Marietta and Cincinnati.....	52	24	618	14,135	638	4.1	4.9
Pittsburg, Fort Wayne, and Chicago.....	221	119	3,334	15,613	488	4.6	3.7
Cincinnati, Hamilton, and Dayton.....	33	32	426	22,968	984	6.7	7.6
Central Pacific.....	179	197	3,200	3,383	129	.....	.....

## EXHIBIT K—(Concluded.)

*Supplemental statement, showing the rates which the Central Pacific Railroad should charge if value of rolling stock and number of tons per mile, compared with each of subjoined roads, are considered as base of comparison.*

NAME OF RAILROAD.	What the maximum charges of Central Pacific should be, judged by value of passenger ears on other roads.....	What rates should be on Central Pacific, judged by difference in number of passengers carried, per mile..	What the maximum charges of Central Pacific should be, judged by value of freight cars on other roads.....	What rates should be on Central Pacific, judged by difference in number of tons carried per mile.....
	Per Mile.	Per Mile.	Per Mile.	Per Mile.
Atlantic and Great Western .....	\$ 22	\$ 18	\$1 25.02	\$ 2 66
Central Ohio Division of Baltimore and Ohio.....	12	10	28.80	38
Cleveland, Columbus, Cincinnati, and Indianapolis	12.6	8	24.20	20
Cleveland and Pittsburg...	18	21	1 43	3 12
Lake Shore and Michigan Southern.....	23.3	18	67.20	1 28
Marietta and Cincinnati...	82	32	49	78
Pittsburg, Fort Wayne, and Chicago. ....	23	28	33.30	72
Cincinnati, Hamilton, and Dayton.....	2 01	1 92	1 52	1 18
	\$3 93.9	\$3 27	\$6 22.52	\$10 32
Central Pacific, average...	49	40	77.81	1 29

## EXHIBIT L.

SARCAMENTO, January 29th, 1872.

HON. GILES H. GRAY, Chairman of Committee on Corporation:

DEAR SIR—Below please find statement of rates of freight per ton weight and measurement prior to eighteen hundred and fifty-four to eighteen hundred and seventy-two inclusive.

Prior to the railroad raids upon the steamboat routes the rates were predecatated upon the weight and measurement, and in order to compete with railroad rates the Navigation Company was compelled to adopt the tariff of weight, which is fully twenty per cent in favor of shippers.

FROM SAN FRANCISCO	Prior to 1854.	1870-'71.	1872.
To Red Bluffs.....	\$100 00	\$20 00	\$13 00
To Chico.....	60 00	12 00	6 00
To Colusa.....	30 00	10 00	5 00
To Marysville.....	30 00	8 00	3 00
To Sacramento.....	10 00	4 00	1 50

Yours, respectfully,

A. REDINGTON.

## EXHIBIT M.

*Abstract of Taxes paid in the State of California by the Central Pacific Railroad Company during the year 1870.*

COUNTIES.	Amount.
Santa Clara.....	\$1,331 28
San Mateo.....	41 96
Alameda.....	\$16,454 74
Construction .....	4,320 82
	20,775 56
San Joaquin .....	10,677 97
Construction .....	124 70
	10,802 67
Sacramento.....	20,552 68
Construction .....	219 20
	20,771 88
Placer.....	32,330 87
Construction .....	7,800 00
	40,130 87
Nevada.....	8,042 24
Construction .....	196 50
	8,238 74
El Dorado.....	1,392 75
Yuba.....	2,845 80
Construction .....	148 79
	2,994 59
Sutter .....	864 15
Butte .....	1,701 00
City of San Francisco .....	388 26
City of San José.....	70 25
City of Oakland .....	1,493 31
City of Stockton.....	130 20
City of Sacramento.....	3,233 63
City of Marysville .....	422 10
School Districts.....	1,306 61
Poll Tax, white men.....	5,550 00
Poll Tax, Chinamen.....	6,870 50
Total .....	\$128,510 41



## EXHIBIT M—Continued.

*Abstract of Taxes paid in the State of California by the Central Pacific Railroad Company during the year 1871.*

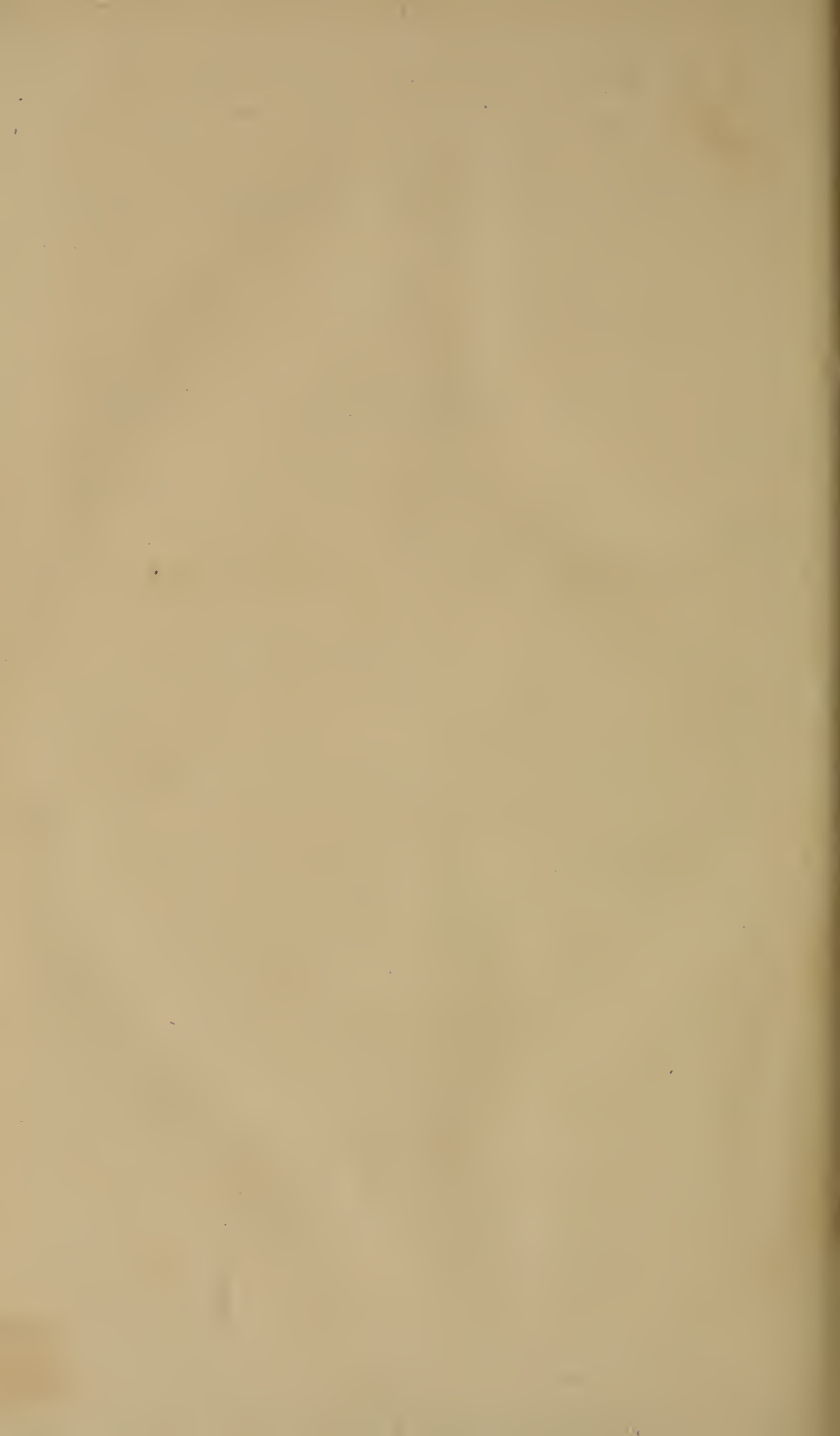
COUNTIES.	Amount.
Santa Clara .....	\$1,375 79
San Mateo .....	43 37
Alameda .....	\$18,084 87
Construction.....	2,602 17
	20,687 04
San Joaquin .....	11,555 14
Sacramento .....	17,068 08
Construction .....	266 20
	17,334 28
Placer.....	22,378 96
Construction .....	1,745 50
	24,124 46
Nevada .....	10,127 29
Construction .....	208 47
	10,335 76
El Dorado.....	1,271 80
Yuba .....	2,740 00
Sutter .....	1,000 00
Butte .....	6,779 50
Construction.....	215 54
	6,995 04
Tehama.....	1,521 24
Stanislaus.....	1,109 68
Construction .....	709 00
	1,818 68
Merced, construction.....	462 00
City of San Francisco, op. and construction...	3,041 86
City of San José .....	70 35
City of Oakland, op. and construction .....	5,133 00
City of Stockton .....	415 00
City of Sacramento .....	6,785 68
City of Marysville .....	390 00
Town of Brooklyn.....	130 26
School Districts .....	1,374 04
Poll Tax, white men.....	7,875 00
Poll Tax, Chinamen.....	5,810 25
Total .....	\$132,290 04

E. H. MILLER, JR., Secretary.

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THE

# Question of Subsidy

CONSIDERED IN REGARD TO

THE

## Power of Counties

TO HOLD STOCK IN

Railroads, &c.

OPINIONS

OF

McALLISTERS & BERGIN, Esqs.,

Col. J. P. HOGE, *esq.*

Judge W. W. COPE, *esq.*

S. M. WILSON, Esq.

C. WITKAMP

and

*Logg & Newcomb*

THE  
JOURNAL OF THE  
AMERICAN MEDICAL ASSOCIATION  
PUBLISHED WEEKLY  
CHICAGO, ILL.

CHICAGO, ILL.

CHICAGO, ILL.

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OFFICE OF THE

San Francisco and Colorado River Railway Co.

---

SAN FRANCISCO, September 9th, 1872. -

*To the Honorable the Mayor, and the Board of Supervisors, of  
the City and County of San Francisco,*

GENTLEMEN :

On the 26th inst. we petitioned your honorable body to pass an ordinance submitting to an Election of aforesaid City and County, at the next general election, to be held on the 5th day of November next, the question of voting a subsidy of \$10,000,000 in the bonds of said City and County to the San Francisco and Colorado River Railway Company, in aid of, and for, and in consideration of the construction of, a Railroad from the Harbor of said City and County, and along and near the Bay of San Francisco, and on the west side thereof, and extending to the Colorado River, at or near the 35th and 32d parallels of latitude.

The great public necessity for such a road was, perhaps, sufficiently apparent to need no accompanying argument to secure your prompt and favorable action thereon. At the time of the presentation of aforesaid petition we entertained such views; and while there has nothing occurred to change or modify the necessity for the road or the aid, in our judgment there appear to be reasons why we should at this time supplement the petition aforesaid by a brief statement of our plans and purposes, in connection with the

construction of the S. F. & C. R. Railway. On the 10th inst. we published the following address to the public, to which we invite your attention, viz :

OFFICE OF THE SAN FRANCISCO AND COLORADO RAILWAY Co., }  
No. 306 Sansome Street. }

SAN FRANCISCO, August 10th, 1872.

*To the Public:* On the 19th ult. this corporation filed its articles of association, which was organized for the purpose of constructing a railroad from Mission Bay, in the harbor of San Francisco, to the Colorado river, at or near the thirty-fifth and thirty-second parallels of latitude, over the most feasible route, running through the counties of San Francisco, San Mateo, Santa Clara, Monterey, San Luis Obispo, Santa Barbara, Los Angeles and San Bernardino.

Everything being done in conformity with the statute made and provided for this purpose—the money necessary preliminary to an organization, viz: ten per cent. on one thousand dollars per mile gold coin, deposited to the credit of the Treasurer of the Company in the Bank of California.

The great objects in view in constructing the road were :

*First*—The furnishing of a great trunk line railroad below the snow line from the Atlantic to the Pacific Oceans, the Pacific end of which should forever belong to the people of the City and County of San Francisco, and through which it proposes to run, and be built by their citizens and their money, and, therefore, in sympathy and wholly identified with them and their social and commercial interests.

*Second*—While it proposes no warfare with any existing railroad interest, it does propose inaugurating a system closely allied with the commercial and industrial wants of our people, ENTIRELY INDEPENDENT OF ANY RAILWAY INTEREST, FREE OF ANY ALLIANCE, PRESENT OR PROSPECTIVE, WITH SUCH AN INTEREST ON THIS COAST OR STATE; AND TO ENTER INTO ENTIRELY SATISFACTORY GUARANTEES WITH THE CITY AND COUNTY OF SAN FRANCISCO THAT ITS RAILWAY SHALL BE HELD AND OPERATED IN ENTIRE CONFORMITY WITH SUCH A SYSTEM.

*Third*—It proposes to stretch out its arms to meet the oncoming railroads at or near the thirty-fifth or thirty-second parallels, and thus hasten the completion both of the Atlantic and Pacific

and the Texas Pacific Railroads in from two to three years, and by whatever time we do anticipate their completion, place San Francisco that much earlier in communication with Arizona, New Mexico and the great Valley of the Mississippi; and in doing this, we propose to extend the hand of friendship to those roads aiming at those points, to offer them just and equitable arrangements for exchange of business, and in the construction of such a long and expensive portion of the line, a moral and financial benefit that it would be difficult to overestimate.

To do this, we need the cordial support of the citizens of San Francisco, and the counties through which our road runs; and we need and must have the subsidy aid which the City and County of San Francisco is empowered to give to the extent of \$10,000,000, and aid from other counties, which have the power, in relative sums. We are aware that a great variety of views are entertained as to the best mode of securing the construction of the contemplated road; and we realize that in a matter of such vital interest to this city and State, the most intelligent and honest people may differ as to the wisest plans; and hence we do not deem it proper for us to charge those who differ with us with being dishonest, or being actuated by unworthy motives. We think we have canvassed all reasonable modes of accomplishing the great work before us. Whatever may have been our views as to the wisdom or desirability of having the City and County of San Francisco and other counties becoming directly interested in the stock of the company, or collaterally benefited by the creation of a *trust* for their benefit, we found ourselves confronted with the statute of the State, which prescribes the only way in which aid could be extended to this or any other Railroad Company, viz: *By direct donation of the Bonds of the Counties*. The following correspondence will place this branch of the subject in a clear, and, we think, an unmistakable light:

OFFICE OF THE SAN FRANCISCO AND  
COLORADO RAILWAY COMPANY, }  
SAN FRANCISCO, July 30th, 1872.

S. M. WILSON, Esq., Attorney-at-Law, Present—*Dear Sir*: Our Company desires your opinion upon the following points, viz:

*First*—Has the City and County of San Francisco authority to grant a *subsidy* to aid in the construction of a railroad, and if so, to what extent?

*Second*—Has said City and County the legal power to *subscribe*

to the stock of a Railroad Company, and if so, the extent and manner of doing it?

*Third*—If the City and County aforesaid cannot subscribe to the stock of a railroad company, but can grant a subsidy, is there any legal device by which, in her own behalf or by others as Trustees, or otherwise, for her, she can be legally secured an interest in the stock or evidence of obligation of a railroad company, in consideration of such subsidy? An early answer will oblige,

Your obedient servant,

JOHN MORA MOSS, President.

SAN FRANCISCO, August 9th, 1872.

J. MORA MOSS, Esq., *President San Francisco and Colorado River Railway Company*—Dear Sir: Your letter of the 30th ultimo was duly received. The questions propounded by you require considerable examination, and their importance demanded the time consumed before making a reply. In view of your request for an early answer, the conclusions arrived at are now given, rather than an extended opinion. First, the authority to aid in the construction of railroads is given to the City and County of San Francisco by an Act of the Legislature entitled "An Act to empower the Board of Supervisors of the several counties of the State to aid in the construction of a railroad in their respective counties," approved April 4th, 1870, and a Supplemental Act approved on the same day. These provide that the several counties, including the City and County of San Francisco, shall be authorized to aid in the construction of railroads, by the issue of bonds, after the expression of a favorable opinion by the people at an election in the manner prescribed. The validity of these Acts is settled by the decision of the Supreme Court of this State in the case of the Stockton and Visalia Railroad Company vs. The Common Council of the City of Stockton, April term, 1871, and being valid, it follows that aid may be granted in the manner and to the extent therein provided. The amount of the bonds is limited to five per cent. of the value of the taxable property, according to its valuation on the assessment roll last preceding the issue of the bonds; and if there is any outstanding indebtedness incurred by granting other aid to railroads, the amount of the indebtedness is to be deducted from the amount of the bonds.



*Second*—The City and County of San Francisco has no power to subscribe to the stock of a railroad company. The Acts above referred to contain the only provisions now in force authorizing San Francisco to aid in the construction of railroads. The aid contemplated is a donation or subsidy, and not a subscription to the stock of a railroad company. Such a subscription is not within the letter or meaning of the law. The power given is simply to issue bonds, and it was not intended that any liability should be created except for the payment of the bonds. The power to become a *stockholder* involves very different considerations and consequences. It could not be exercised without subjecting the City and County to the same duties and same liabilities imposed by law upon other stockholders, and the power can only exist by express grant from the Legislature.

*Third*—Having come to the conclusion that the City and County cannot directly become a subscriber to the stock of a railroad company under any existing statute, and that in granting aid the corporation is limited to a donation or subsidy under the Acts of the Legislature referred to above, I know of no legal device by which the City and County can indirectly secure an interest in the stock; for the law will not allow by indirection what cannot be done directly. Nor can the City or County contract for any dividends or other compensation from a railroad company as a consideration for the subsidy, as that would be to destroy its character as a donation. Any legal scheme to evade the plain meaning of the law, would in my judgment prove a mere delusion and snare.

However, the electors of the city have one great power on this subject, which can always be exercised beneficially. The law provides that "the route for which aid is proposed to be granted shall be definitely described" in the notice for the election at which the people express their will on the subject. This gives them the power to designate the termini of the route, and in effect to make the donation dependent on conditions that cannot be evaded.

Respectfully your obedient servant,

S. M. WILSON.

Intelligent engineering parties will soon be organized and in the field, exploring for the best and most direct route to the thirty-fifth and also the thirty-second parallels of latitude at the Colorado river.

It being our purpose to bring this enterprise within the reach of every citizen who desires to sustain an independent railroad, free of



any other in the State, or of any combination therewith, and our organization being perfected, as before stated, and subscriptions having been already made to it to the amount of \$4,630,000, we now invite the public to call at the office of the Company and subscribe to the stock in such sums as may be desired by each individual.

It is due to the citizens of San Francisco and the State that the enterprise should be fairly and intelligently placed before them. We mean business, and have no purpose except what we have herein stated.

By order of the Board of Directors.

J. Mora Moss,  
Peter Donahue,  
W. C. Ralston,  
Geo. H. Howard,  
John O. Earl,  
Michael Reese,

John Parrott,  
H. M. Newhall,  
Wm. T. Coleman,  
R. B. Woodward,  
Josiah Belden,  
Albert Gansl,

H. D. Bacon.

Since the publication of the foregoing address, there appearing not an unreasonable desire, perhaps, on the part of the public, that the tax-payers should have, as such, some direct proprietary interest and, therefore, voice in the management of so vast and influential an enterprise, we have consulted with the able attorney whose opinion we have given above, on the power of the City and County aforesaid to become a beneficiary; also McAllisters & Bergin, J. P. Hoge and W. W. Cope, Esqs., in reference to devising a plan whereby it would be possible to set apart stock of aforesaid Company, to be held and distributed to the tax-payers in equal amounts, and from time to time, as they pay taxes levied for the payment of either interest or principal on the bonds issued in aid of said railroad.

The following letter will show that those eminent attorneys regard it as a matter of impossibility to make any legal provision for distribution of stock among the tax-payers based upon the subsidy, or giving them any voice in the management of the company :

SAN FRANCISCO, September 7th, 1872.

J. MORA MOSS, ESQ., President San Francisco and Colorado River  
Railway Company :

*Dear Sir:*—We have carefully examined the Acts of the Legislature of this State of April 4th, 1870, (see Stats. 1869-70, pp. 744-

746) and the Act under which Railroad Companies are organized in this State, (Stats. 1861, p. 607) and the Acts amendatory and supplemental thereto, in connection with the points upon which you desire our opinion. We understand that you have petitioned the Board of Supervisors of this City and County to pass an ordinance submitting to the people at the next general election the question of granting you a subsidy under the first-mentioned Acts; that you have asked it as a pure donation, under the impression that it must be that and nothing else under the law; but that you are willing to set apart stock of your Company as a reserve, to be transferred to trustees in consideration of such subsidy, for the use of the City and County, to be transferred to the latter, or to be applied in payment of the bonds granted, or to be issued to the tax-payers, or in some other way returned to the City and County or tax-payers, if we can devise a legal plan by which this can be carried out. We also observe that you are willing to allow the City and County, and other Counties that may grant you such subsidies, a representation in the Board of Directors, if that can be legally accomplished.

We beg leave to say that, in our opinion, the subsidy contemplated by the Acts of April 4th, 1870, is a pure donation, and nothing else. Of course, that which is a pure donation cannot be made a consideration for any promise or agreement. That would at once change its nature. You cannot barter for or sell a donation, for that is a contradiction in terms. The power granted in those Acts being a special one, must be strictly pursued. Nothing can be omitted which the Acts require. Nothing can be added to them which is not there now. The only question which the Board of Supervisors can submit to the people at the election is, whether a donation of the bonds shall be made or not.

The Board has no power to submit to the people the question whether they will lend, sell or bargain off their bonds for some consideration to be paid either to the county or to the tax-payer or to trustees for them, or for any other consideration. And if the people vote for a subsidy, the Board can only grant the subsidy as a donation; for to sell it or otherwise barter it away, would be departing from the election of the people.

The whole power, therefore, of the Board is first to submit at the election merely the question of donation or no donation: the people can only vote on that. And if the donation is determined at the election, then the Board can only follow out that same intention, and grant the subsidy as a pure donation. The benefit which the city gets by having increased railroad facilities and all the incidental ad-

vantages, is the only consideration contemplated by the law for the donation.

A proposition of the Railroad Company to the Supervisors, and through them to the people, that if the people will vote for the donation, the company will reserve and set apart a portion of its capital stock for the use of the City and County, or to be sold in the market to pay the bonds issued, is simply a proposition to commit a fraud on the stockholders, on the law, and on the State; and is clearly illegal as against public policy.

Being thus clear on the spirit and letter of the laws referred to, we next consider whether by any legal device, stock can be reserved or placed in the hands of Trustees, and ultimately given to the city and county and other counties, or applied to the payment of the bonds—granted as the subsidy—or given to the tax payers. By the Act under which all railroad companies in this State are organized, it is provided that “the amount of the capital stock of the company” shall be “the actual contemplated cost of constructing the road, together with the cost of the right of way, motive power and every other appurtenance or thing for the completion and running of said road, as nearly as can be estimated by competent engineers.” (Stats. 1861, p. 607, Sec. 2.)

By Section 6 of the same Act, it is provided that “in case the capital stock shall be ascertained to be greater or less than is necessary for completing, operating and maintaining the road, then the capital stock may be reduced or increased,” &c.

By this Act it is also made essential that there shall, before incorporation, be subscribers to the amount of \$1,000 per mile of the proposed road, ten per cent. of which must be paid in. This is a condition precedent to the very existence of the company. After the company is organized, the Act contemplates that the rest of the capital stock shall be raised by subscription.

The directors are authorized to call in and demand from the stockholders the sums by them subscribed, in equal installments of not more than ten per cent., unless a greater amount is stipulated in the articles of association. The Act positively prohibits the issuing of any certificate of stock unless it is fully paid. Prior to its being fully paid, stockholders only receive receipts for the installments paid on the stock. A “Book of Stockholders” is required to be kept, showing the amount of stock owned by each, and the amount of cash paid on each share of stock.

From the whole scope of the law we say, in the language of Mr. Justice Rhodes, of the Supreme Court of California, in the case of

*Brewster vs Hartley*, (37 Cal. R. 29) "The manifest purpose was to place all stockholders upon an equal footing. The Act is not liable to the charge of inequality, if not absurdity, of restricting the corporation so that it could not issue the certificates of stock to the original subscribers to the stock without payment in full, and permitting it to issue the remainder of the stock without payment." \* \* The "capital stock of a corporation, prior to its being issued, cannot in any proper sense be called the property of the corporation." \* \* "The corporation only possesses the *right*, the *power* to issue the stock; and a condition precedent to the exercise of the power is the purchase and payment for the stock."

The company is expressly prohibited from making dividends except from surplus profits, and it is declared unlawful to divide, *withdraw*, or pay to stockholders *any of the capital stock* of the company.

We are decidedly of opinion that no stock can be given away by the company, nor can it be sold by the company in the market at less than its *par value*. The company cannot issue any certificate to trustees, unless the stock is fully paid. If it shall credit on the books of the company any stock to trustees, it must make them stockholders. If they are stockholders in trust, there must be some beneficiary of the trust. Then two results follow, viz: these trustees must pay up for ~~this~~ stock the same as any subscribers; and, second, either the trustees or the persons who are to have the benefit of the trust fall under Section 12 of the Railroad Act we have referred to, which provides for the personal liability of stockholders. The counties if the beneficiaries assume the personal liability.

The stock held by such trustees cannot be exempt from the payment of its installments till the par value is paid up. Somebody must pay them, or the stock must be sold as delinquent. The company cannot release these payments. Such trustees, unless they become subscribers on the same basis with others, cannot sell the stock in the market below its par value, so as to pay off the subsidy bonds. Neither could the taxpayers receive the benefit of this stock from any such trustees, or from the company itself, except through subscription, or payment of the par value of the stock.

Stock not subscribed for is not property. The directors have only the power to issue it in the manner prescribed by law. In the language of the late Judge McLean, of the Supreme Court of the U. S., stock, "before it is taken by subscription, means nothing more than a power in the directors to receive subscriptions for stock.

\* \* \* It is said there is nothing in the Charter which prohibits the directors from taking subscriptions of stock for less than fifty



dollars a share. No such provision was necessary. The duties of the directors are plainly pointed out in the Charter, and as their powers are wholly derived from that instrument, it was not necessary to prohibit them from doing that which the Charter did not authorize them to do. The Charter fixed the rates at which the shares should be subscribed. This is matter of law," &c.

It is equally clear that the company cannot enter into any contract to set apart shares in the names of trustees or otherwise, to be thereafter sold in the market, and the proceeds applied in return for donations. This would be in effect to give away the stock, which cannot be done.

Railroad corporations, organized under the laws of this State, are public corporations, and the State is interested in them. The directors are not only trustees for the stockholders, but for the State. The State has "a right to demand that all the resources, rights and credits of the company shall be devoted to its completion." To withdraw any part of its capital stock, and dispose of it in return for donations, is to violate a public duty, and commit a fraud on the law.

At any future time the corporation could set aside the act as *ultra vires*—beyond its own powers—and no contract could prevent the corporation from so doing.

As to your last inquiry, in reference to giving the Counties voting for a subsidy a representation in meetings of stockholders and the Board of Directors, we beg leave to say that it is legally impossible. No one can participate in stockholders' meetings except actual stockholders or their proxies; and no one can be a Director unless he be a stockholder, "owning stock absolutely in his own right." Of course, therefore, the City and County, not being a stockholder, can have no voice at a stockholders' meeting, directly or indirectly; the actual stockholders have all the power given them by law. No reserved or unsubscribed stock can be voted on at a stockholders' meeting. Stockholders cannot agree to let any one participate at their meetings except stockholders. No such proposed Trustee could vote unless he subscribed for the stock. The Directors cannot bind themselves to do an illegal act, and they cannot agree not to exercise all the powers with which the law clothes them.

The suggestion has been made that most, if not all, of these things might be done if the original articles of association of the company provided for them, and the stockholders consented. But we are unable to see that this would change the matter. That which is illegal in itself under the law, cannot be made legal by the



articles of association. The company and its directors cannot give themselves new powers, nor divest themselves of their lawful powers by an agreement among themselves or their stockholders. They may do what the law permits, and the articles of association must be pursuant to the law. We gravely doubt whether the whole articles would not be void if such illegal provisions were engrafted in them.

All schemes and devices such as we have referred to, to escape the substantial requirements of the law, are too artificial; they are repugnant to the spirit and intention of the law and constitution, and are at once impracticable and illegal.

We are of opinion that the City and County must grant you the subsidy as a pure donation, or not at all.

Respectfully your obedient servants,

*And C. Pittman*

S. M. WILSON,  
J. P. HOGE,  
McALLISTERS & BERGIN,  
W. W. COPE.

There is, therefore, in our judgment, (justified as aforesaid) no safe plan in which aid can be granted except in the way we have asked it; and if we cannot obtain the requisite assistance without resort to subterfuge, without making false pretences, to deceive and bribe the electors of the City and County of San Francisco—without inviting endless litigation in consequence of fraudulent attempts to gain a subsidy, we prefer an honorable defeat in our efforts before your body. We embrace this opportunity to reiterate, in the most solemn manner, that our enterprise is “entirely independent of any railway interest, and free from any alliance, present or prospective, with such an interest on this Coast or State.”

With this statement, we submit our claims for aid to your Honorable Body, and shall bow submissively to your decision.

We remain,

Very respectfully,

Your obedient servants,

J. MORA MOSS,  
JOHN PARROTT,  
PETER DONAHUE,  
H. M. NEWHALL,  
W. C. RALSTON,  
WM. T. COLEMAN,

R. B. WOODWARD,  
JOHN O. EARL,  
JOSIAH BELDEN,  
MICHAEL REESE,  
ALBERT GANSL,  
GEO. H. HOWARD,

H. D. BACON.

The following opinion of the eminent attorney, John T. Doyle, Esq., while it is not adopted as the views of the San Francisco and Colorado River Railway Company, is, nevertheless, regarded of so much importance in its bearings upon the foregoing subject, as to be worthy of much consideration by the citizens of the City and County of San Francisco :

COMMITTEE ROOM OF THE BOARD OF SUPERVISORS, }  
SAN FRANCISCO, September 5th, 1872. }

*Mr. John T. Doyle—*

DEAR SIR: At the present time the Board of Supervisors, occupying a peculiarly responsible position in consequence of the various applications for municipal aid to railroads, seeks information wherever its existence is indicated.

In your communication to the "Editors *Alta*" of September 4th, 1872, you have arrested the attention of the Committee by this clause, to wit: "Abandon the impracticable (and probably illegal) scheme of fifty trustees to control a majority of the stock." Why illegal? Please explain for the benefit of all concerned, and oblige

CHAS. R. STORY,

H. L. KING,

S. P. TAYLOR,

Judiciary Committee, Board of Supervisors.

SAN FRANCISCO, September 9th, 1872.

*Messrs. Charles R. Story, H. L. King and S. P. Taylor, Judiciary Committee of the Board of Supervisors—*

GENTLEMEN: I am in receipt of your letter of September 5th, inquiring why I thought the scheme of fifty Trustees, to control a majority of the stock, etc., "illegal."

The expression "probably illegal," used by me, was intended merely to signify "probably ineffectual to secure to the city the benefits designed by the plan." I had not, at the time, carefully examined or considered it, and merely spoke from first impressions. I have, however, since done so, and am confirmed in the belief that it will fail to accomplish its object.

The following are among the reasons :

The powers of the Directors of a Railroad Company, and the character and attributes of its stock are not derived from the consent of the subscribers, nor from the terms of their subscription, but from the Railroad Law alone. What it permits, Directors may do ; what it forbids, they may not. The contract of subscription to stock is one by which each subscriber agrees to take and pay for so many shares, and the Company agrees to sell them to him. Definitions, inserted in it, of the powers of the Directors, the policy, or course of business of the Company and the like, are wholly out of place, and neither bind the Company nor impress any particular character on the shares of stock. The power of attorney to vote the stock contained in the subscription paper of the California, Atlantic and Pacific Company, may, perhaps, be held to be irrevocable by the individuals who subscribe it, whilst they hold the stock, (though that is not clear) but it certainly does not bind any subsequent purchaser of the stock ; he would take the shares with liberty to vote on them as he saw fit, notwithstanding the declaration contained in the paper that the agreement "shall be binding on and control the Company, and all subscribers and stockholders thereof and their assigns, and shall run with the stock to all owners and holders thereof." The law of covenants is part of the common law, and as old as the hills ; such a thing as a covenant running with stock and thus depriving it of one of the attributes conferred on it by law, was, I venture to say, never heard of before.

To permit it to prevail would be to allow the Board of Directors first appointed for a company, to give to it an organization, and to its stock a character wholly different from that contemplated by the law of the State. This elaborate scheme of fifty trustees, nominated by the first directors, to control, perpetually, thereafter, a majority of the stock, will, therefore, fail, if for no other reason, simply because shares of the stock will, inevitably, change hands, and the purchasers will naturally insist on their right to control their own stock, and to have what they pay for, and the law will sustain them. But even against the original subscribers I do not believe it can be enforced. Mr. Pringle's letter, published in Saturday's *Bulletin*, admits that the city cannot do so, but suggests that each subscriber to the stock can enforce it against the others. I confess I do not see on what ground. You will observe that the ordinance submitted makes no reference to this proposed trust, but

simply *gives* a subsidy of ten millions; the gentlemen who subscribe, agree *among themselves, but not with the city*, that they will devote to its benefit a corresponding amount of stock. But that agreement being wholly independent of the subsidy and the city no party to it, is merely an undertaking to unite in a patriotic object, binding only in honor, and probably even beyond the power of the Legislature to make legally obligatory against any objecting stockholder. Besides, even if the subscribers can enforce it as against one another, what guaranty is there that they will? To attempt it will be costly, and to omit it profitable, for if the scheme fails, each share of the two millions of stock they have subscribed is enhanced in value six-fold, by converting the city subscription into a subsidy!

If the Supervisors desire to vote aid to a railroad company, to be compensated hereafter in shares of stock, there is no need of this immensely complicated machinery of fifty trustees and five hundred powers of attorney to them, to vote unknown fractional interests of every man's stock, the very complexity of which would probably break it down, if it were valid. Let the ordinance voting the aid simply express the condition that the city is to have stock for the amount of it, issued to her, or such persons in trust for her, and on such terms as the Legislature shall hereafter provide. Let the Company assent to that condition, and leave the Legislature when it meets to provide for the control of the stock in such way as may be judged best.

This change would doubtless be assented to by the Directors of the C. A. & P. Co., the more readily as it would relieve them of the appearance of solicitude to perpetuate their own power by concentrating the proxies of a majority of the stock in the hands of trustees nominated by themselves.

There is another difficulty, however, in this case to overcome, which will require a more serious change in the plans of the C. A. & P. Co. It is this: It is known that the Company is organized to build its road under arrangements for consolidation with the Atlantic and Pacific Company, chartered by the Act of Congress of July 27th, 1866, which is a foreign corporation. The terms of the compact have been made public in the newspapers, and are briefly set forth in the subscription paper above referred to. The latter exacts in advance the assent of all subscribers to the stock, to consolidation with that Company, or to a conversion of the assets and property of the California Company into its stock on certain terms. Nobody, I presume, will contend that the Supervisors possess the



power to grant aid to a foreign railroad corporation, and it can hardly be claimed that they can do indirectly what they cannot do directly. Here you are asked to vote a subsidy of ten millions to a company, the directors of which refuse to permit any of its stock to be subscribed for except on condition of assenting, in advance, to consolidation with a foreign company, and a transfer to it of all property and franchises in exchange for that company's stock.

Except in the form of words, how does this differ from giving the same ten millions directly to that foreign company? You have no right to do it.

The city wants a competitive road as well as additional railroad communication with the interior of the State. Municipal aid seems necessary to obtain these objects. The proposal to give stock or other equivalent therefor is certainly preferable to one inviting a simple donation; but sound policy dictates that the control of the roads built by the city's money should be retained, permanently, in the hands of our own citizens. The law has given you no power to vote the public money to aid a foreign corporation on any terms, and law and good policy, therefore, both forbid aiding any company committed in advance to consolidation with a foreign company, on any terms.

The subject of your communication being of great public interest, I have not hesitated in this reply to go beyond the range of your inquiry. I have also prepared and here enclose an amendment to the ordinance submitted by the C., A. & P. R. R. Co., which ought to be satisfactory to the gentlemen composing it, and which is but just to the city and her citizens.

The reasons for them are briefly these :

1. Where all are taxed to pay the subsidy, all ought to be at liberty to subscribe to the stock.
2. The terms of any trust in favor of the city should not rest on the mere honorable obligation of individuals, however upright and conscientious, but should have the sanction of law.
3. The time for completing the road should be long enough to enable the Company to do the work. It will take them several months to get started; to require its completion in so short a period as four years would simply force them into the hands of Eastern railroad sharps, who would plunder us.

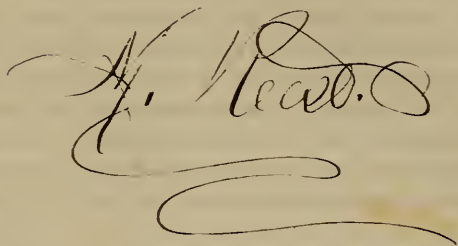
The policy herein advocated, of retaining the ownership of the



roads we build, is at variance with ideas heretofore expressed by me. Having by further examination and reflection become satisfied that my first impressions were erroneous, I feel bound in duty, to correct them.

Very respectfully, your obedient servant,

JOHN T. DOYLE.

A handwritten signature in cursive script, reading "J. T. Doyle". The signature is written in dark ink on a light-colored, slightly aged paper. The letters are fluid and connected, with a prominent flourish at the end of the word "Doyle".

*Rail. R. Co.*

LANDS

OF THE

Central Pacific Railroad Company

IN

CALIFORNIA,

NEVADA AND UTAH.

JANUARY 1, 1877.



# Lands of the Central Pacific Railroad Co.

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The Central Pacific Railroad Company, of California, was one of the companies authorized by Act of Congress to construct a railroad from the Missouri River to the Pacific Ocean—a part of the continental railroad that extends from the Atlantic Ocean to the Pacific. It was empowered by Congress to construct its road eastward from the navigable waters of the Sacramento River until it should meet and connect with the Union Pacific Railroad. This connection was made near Salt Lake.

The California and Oregon Railroad Company was authorized, by Act of Congress, to construct a railroad northerly from a point on the Central Pacific Railroad, in the Sacramento valley, until it should meet and connect with the Oregon and California Railroad, which runs south from Portland, Oregon.

The Central Pacific Railroad Company of California and the California and Oregon Railroad Company, together with the Western Pacific Railroad Company, were merged and consolidated into one corporation, and a new name, "Central Pacific Railroad," given to the consolidated company.

The completion of these railroads was considered of such great national importance, that the Congress of the United States, for the purpose of aiding in their construction, gave to each of the companies an extensive grant of land.

As the grants are, in some respects, dissimilar in character, they will be described separately. First, the lands given to the Central Pacific Railroad of California (main line); and second, those granted to the California and Oregon Railroad, or California and Oregon Division of C. P. R. R.

# Lands of Central Pacific Railroad,

## MAIN LINE.

Under the Pacific Railroad Acts of Congress, passed July 1st, 1862, and July 2d, 1864, there is granted to this Company every alternate section of public land, designated by odd numbers, within twenty miles on each side of its railroad, excepting, however, mineral lands, and tracts to which pre-emption and homestead claims had legally attached. This grant is equivalent to about twenty sections to each mile of the road, and as the sections contain six hundred and forty acres each, it amounts to twelve thousand eight hundred acres per mile, less the exceptions above noted. On the reserved mineral lands within ten miles on each side of the line of railroad, the timber is granted to the Company. These acts are in terms a present grant, and are therefore, a full and perfect conveyance from the original source of land titles, the National Government.

### Mode by which Public Lands are Surveyed and Designated.

To persons not familiar with the public land system of the United States, it may be necessary to make a brief explanation of the manner in which they are surveyed, as, with an understanding of this, a definite idea will be had of the extent and situation of the Company's grant of lands.

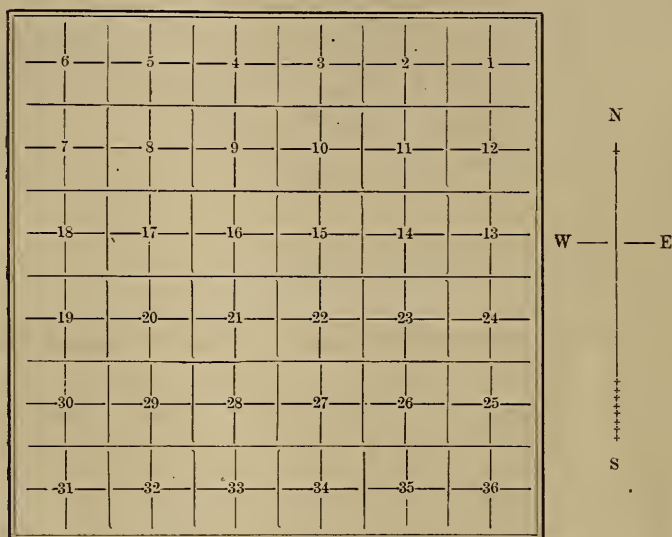
The United States causes its lands to be surveyed by its officers into townships of six miles square; these townships are subdivided into thirty-six sections of one square mile each—or six hundred and forty acres. Each section is again subdivided into four quarters of one hundred and sixty acres each, and again into sixteen quarter-quarter sections of forty acres each, which is the smallest quantity sold, except fractions on the borders of rivers, lakes, etc. In making these surveys in Central California, Mount Diablo, a prominent peak near the junction of the Sacramento and San Joaquin rivers, was selected as the initial or starting point, from which four lines were run, two north and south called the meridian line, and two east and west called the base line, and from these lines the several townships are surveyed; those north and south being numbered from the base lines 1, 2, 3, etc., north or south of the base line



as the case may be, and those lying east and west described in the same way, as east or west of the meridian line. Thus, the city of Sacramento is described as being in township eight north, of range five east, of Mount Diablo base and meridian; that is, it is in the eighth tier of townships north of the base line, and the fifth east of the meridian line.

The following is a plat showing the manner of subdividing and numbering the sections in each township :

T 8 N., R. 5 E.



### **The Lands Granted to the Company.**

From the Acts of Congress quoted, it will be seen that the Government has granted to the Company all the alternate sections designated by odd numbers, as 1, 3, 5, 7, etc., for twenty miles on each side of the line of the road, that had not at the date of the grant been otherwise disposed of by the Government; thus, as before stated, for each mile of road constructed it receives 12,800 acres of land.

### **Process by which Title is Acquired.**

As the railroad is completed and accepted by the Government, the Company makes a list of the lands to which it is entitled lying within twenty miles on either side of such com-

pleted section. This list, if found correct, is duly certified by the proper United States Land Officers and forwarded to the Land Department at Washington, where it is again examined. Upon this the patent is issued, and thus the title of the Company is perfected.

### **Even Numbered Sections Retained by the Government.**

The minimum price of ordinary public land is \$1.25 per acre, or \$200 for a quarter section of one hundred and sixty acres, but from the fact that the construction of railroads increases the value of the land in their vicinity, a general Act of Congress provides that when the alternate sections are donated to aid in the construction of a railroad, the remaining ungranted sections are increased in price to the "double minimum," or \$2.50 per acre, so that the even-numbered sections within the limits of the grant of this Company can only be purchased at that price.

### **Character of Country through which the Road Passes.**

The City of Sacramento is situated near the center of the great valley of the Sacramento; it is in latitude  $38^{\circ} 31'$  north, and longitude  $121^{\circ} 29'$  west. It is the capital of the State of California, and has a population of twenty-five thousand. From this city the general course of the railroad is north-east, over the river bottom and level prairie lands, a distance of twenty-five miles; at this point it meets the rolling timber lands and low hills that lie at the base of the Sierra Nevada mountains; reaching one of the main spurs of the Sierra it ascends to the Summit, a distance of one hundred and five miles from Sacramento, and at an elevation of 7,042 feet above the sea. At the crest of the mountains it passes through a tunnel and along the mountain side to the bank of the Truckee River. This river is the outlet of Lake Bigler, whose surface is 6,247 feet above the sea; its waters flow north-east and empty into Pyramid Lake, one of the lakes of the Great American Basin, whose waters have no outlet to the ocean. The road follows the banks of the Truckee River to the Big Bend of the Truckee, a distance of one hundred and ninety miles from Sacramento. From this point its course is north-east until it meets the Humboldt River, which flows westward and also empties into the Great Basin. It follows up the banks of the Humboldt River

to its source, and so on in the same general direction around the northern end of the Great Salt Lake.

### **Alluvial or "Bottom" Lands.**

From this statement of the route of the road it will be seen that the Company has every variety of land, situated in the different climates between semi-tropical and temperate. It has some bottom lands—that is, lands that are overflowed by the swelling of the rivers and streams in winter, and which are annually enriched by the deposits brought down by the water from the mountains. Like the valley of the Nile, they produce yearly unvarying large crops, the deposit during each rainy season causing them to be inexhaustible in their fertility. They yield every variety of garden and field vegetable cultivated in a semi-tropical climate, including potatoes, onions, cabbage, pumpkins, beets, tomatoes, peas, and the various small fruits. Large tracts are annually planted with maize or Indian corn, of which large crops are produced. Many farmers have cultivated tobacco, which has always been found profitable. On these lands are also grown large quantities of hops, from the cultivation of which many persons have become wealthy. The hops produced are not excelled by any known in the markets of the world. From the fact that it never rains in this climate during the season they are maturing, they lose no portion of the extractive principle for which they are used, and are said by brewers and others who make use of them to be from ten to fifteen per cent. more valuable than those grown in climates where there are summer rains. Many plantations have been made on these lands with mulberry trees, which thrive almost without cultivation. It is found that the climate of California is admirably adapted to the silk worm, and that here it is not subject to the diseases that affect it in Europe. The weaving of silk goods has been commenced in California. Many kinds of fruit are grown on these lands, such as the pear, apple, plum, cherry, and peach. The largest peach orchards of the State are situated on "bottom" lands.

### **Wheat, Grazing, and Orchard Lands.**

Within the railroad grant, above the bottom lands, and less than twenty miles on each side of the road, and for the

length of twenty miles, are the prairie lands. The land is level, without trees, or with scattering and small groves of oak; it has no underbrush, and with the first rains of November is, without any preparation, ready for the plow. If preserved from the herds of cattle and sheep, it produces annually, without cultivation, large crops of native grasses and wild oats, which make excellent hay.

The exports of wheat from California within the past few years have attracted the attention of the world. In 1873 there were exported, generally to the Eastern States and Europe, from San Francisco :

479,418 barrels of flour, valued at .....	\$ 2,898,980
9,175,960 centals of wheat, valued at.....	18,658,744

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Total value of wheat exports for 1873.....\$21,557,724

The report of the Surveyor-General to the Legislature shows that in California, for the year 1873, 1,727,492 acres were cultivated to wheat, from which the product was 26,704,182 bushels, and 392,327 acres to barley, from which the product was 8,939,169 bushels.

The production of wheat for the year 1876 is estimated at 22,000,000 centals, and valued at \$40,000,000.

The greater part of these large quantities was produced in the great valleys and on the prairie lands. The principal sales by the Railroad Company have, thus far, been of this class of its lands, over 125,000 acres having been sold. There still remain unsold, of the same kind of land, quantities sufficient to support a population of 50,000. These prairie lands, in addition to producing wheat and other cereals, are perhaps the best in the State for general farming and orchards. All kinds of fruit that will grow in a semi-tropical or temperate climate thrive on these lands, including the almond, olive, pomegranate, plum, pear, and apple, as well as many of the nut-bearing trees. They are also well adapted for grazing and dairy purposes. The native grasses start after the first winter rains of December, and grow to June, when they dry to hay in the rainless summer and remain standing upon the ground until the rains of the following year. Farmers, therefore, are not required to cut and save hay for their dairy cattle, except for the short period between the early rains and the springing up of the new grass.



### Grazing Lands and Sheep Ranges.

Still going east along the line of the railroad, after leaving the prairie lands, the road passes over about twenty-five miles of rolling lands and low hills. These contain groves of oak trees, and many tracts are heavily timbered. In the more elevated regions of this section the oaks are intermixed with pines. The land in this section not only produces wheat and barley, but will, if not cultivated or too closely grazed, produce the native wild oats, which were found growing upon them at the time the Americans took possession of the country. Among these hills are grazed large herds of cattle, horses, and sheep. At a distance of twenty-five miles from Sacramento, on the line of the railroad, and within a distance of fifteen miles on each side, as many as seventy-five thousand sheep are grazed throughout the year. No hay is cut or saved for these sheep, or, if any is given them, it is for the short period after the first rains in December, before the springing up of the new grass. The wild oats and native grasses are nutritious and abundant; the groves of oaks afford shade from the heat of the midsummer sun, and the numerous streams flowing through these hills give a plentiful supply of water.

### Vineyard Lands.

The success that in California has followed the cultivation of the European grape, has led to the planting of numerous vineyards. After an experience of twenty years, the fact has been demonstrated that in no place do the various kinds of European grapes, both for wine and the table, thrive so well and produce such excellent qualities of wine and table fruit, as on the hills that lie at the base of the Sierra. The soil is composed of the worn-down particles of granite, quartz and slate, intermixed with lime from the numerous strata of limestone that traverse the mountains. Since the European grape was cultivated in this State—and there are vineyards planted by the Jesuit missionaries that are ninety years old—no instance has been known of a failure of the grape crop. There are no frosts to injure it at the time it is in blossom, and no rain to injure the fruit during the period of ripening. Some of the largest vineyards in the State are on lands that have been purchased from the Railroad Company; many of them producing from two to ten thousand gallons of wine annually, and



in one instance producing yearly over forty thousand gallons. More than two hundred varieties of the grape have been imported from France, Spain, Germany and Hungary, and propagated in California. Every variety that is grown in Europe succeeds well in this soil and climate, and bears more abundantly than in its native home.

The usual manner of planting vineyards in California, is to plow the land thoroughly immediately after the early rains of December; holes are then dug with a spade, eight feet from each other, in rows; in these holes are planted cuttings, or one-year-old rooted vines. Cuttings can be obtained for a trifle, and often without cost, of the kind of grapes most cultivated, at any of the vineyards, during the season of pruning—January and February. One-year-old rooted vines can be purchased for four or five dollars per hundred. The vines are planted eight feet from each other for the purpose of working among them with a one-horse cultivator; and as laborers are scarce in California, this and all other branches of agriculture are most economically conducted, by substituting the labor of animals for that of man. If the vineyard has been planted with cuttings, an average of from ten to fifteen per cent. fail to take root, and these have to be replanted the following year. If rooted vines are planted, not to exceed two or three per cent. will fail to grow. Each year the vines have to be pruned and the vineyard plowed; the vineyard should also be cultivated in May or June to kill the weeds. The third year the vines will commence bearing, and increase in quantity each year for a great many years. It has been estimated that the average annual production of all the vineyards in the State, of five years old and upward, is one thousand gallons of wine to the acre. The process of making wine is as simple as that of making cider. The grapes when ripe are pressed, and their juice poured into clean casks, where it is left to ferment. In 1873, as shown by the report of the Surveyor General, there were made in California, four million two hundred and two thousand and one gallons of wine, and two hundred and seventy-seven thousand three hundred and sixty-five gallons of brandy.

This business has so largely increased that the product of vineyards for the year 1876 is estimated at 11,000,000 gallons of wine, valued at \$3,000,000.

### Raisins.

A considerable industry has lately been developed in California; that is the cultivation of the raisin grape and the manufacture of raisins. The process of converting the grapes into raisins is so simple that it can be done by children. When the grapes are ripe, the bunches are cut and spread upon boards, in the sun, and turned each day until cured; after which, they are boxed and forwarded to market. Some vineyardists, in addition to making large quantities of wine and brandy, have each year also made thirty thousand pounds of raisins. Of the unsold lands of the Railroad Company there are, at least, 75,000 acres suitable for vineyards.

### Valley Lands among the Hills.

Ascending the Sierra, and above the vineyard lands, the oaks give place to dense forests of pines, firs and cedars. In the valleys of these hills are numerous farms and dairies, as well as sheep ranges. In these valleys all the fruits of the temperate climates are cultivated with remarkable success. The principal field crops of this region are barley, potatoes, turnips and hay.

### Timber Lands.

The pine forests of these hills, in quantity and in the quality of lumber made, are hardly excelled on the North American continent. They give employment to many saw-mills and a large number of men. The construction of the railroad through this region has cheapened the price of lumber, and in a great measure stopped its importation from other States. A large feature in the business of the railroad, is the transportation to the valleys of lumber for building and fences. The average price in the valleys for lumber for fences, since the completion of the railroad through the pine forests, is from eighteen to twenty dollars per thousand feet. The cities, towns, villages, and the mines in Nevada and Utah, along the line of the railroad, furnish an extensive and profitable market for lumber. In a few years, when branch railroads shall have more completely reached the vast mineral region of the treeless interior of the continent, these inexhaustible forests will support a large population of men engaged in felling trees and manufacturing lumber. Of timber lands and valleys among

the hills of the timber region, there remain unsold lands—to which the Company is entitled—amounting to at least five hundred thousand acres,

The production of lumber in California for the year 1876 is estimated at 440,000,000 feet, valued, at the mill, at \$2,000,000.

### Dairy Lands of the Mountains.

Among the higher ranges of the mountains are extensive and numerous valleys that produce nutritious and luxuriant grasses, which are extensively grazed by large and numerous herds of cattle and sheep during the summer and autumn months. The amount of butter and cheese that is sent to market from these valleys is yearly increasing. The quantity of butter made in this State in 1873, was 5,408,744 pounds, and of cheese, 5,488,266 pounds, not nearly sufficient to supply the demand; and as yet large quantities are imported.

### Mines and Quarries.

The railroad passes through the entire length of Placer County, one of the principal gold-mining counties of California. Lands containing gold and silver are not included in the grant to the Company. All the lands in the mineral region are not what are denominated mineral lands. The mineral lands are a very small portion of the area, even in the strictly mineral regions. Lands containing coal and iron are not deemed mineral lands. Near the line of the road are extensive beds of iron ore, said to be valuable, but none of which have yet been worked. The granite quarries near the road are numerous, and those that have been opened give employment to a large number of men. Nearly all the granite now being used in the State, including that used by the Government for fortifications, by the State for its public buildings, and for the bulkhead in the harbor of San Francisco, as well as for street and building purposes, is from quarries on lands purchased from the Company.

Lands belonging to the Company containing limestone, with an abundance of oak and pine wood on the same, are to be found at various points near the line of the road, within a distance of forty miles from Sacramento. Many of these quarries have been opened, and large quantities of lime are transported by the railroad, and distributed over the State. White and variegated marble, for building and ornamental purposes, have

been discovered at several points, and work has been commenced in opening the quarries and forwarding the product to market.

### **Grazing and "Bottom" Lands in Nevada.**

The railroad passes through the whole length of the valley of the Humboldt, in the State of Nevada. On the banks of the Humboldt River, and on the banks of the streams that flow into this river, are extensive tracts of bottom land that are successfully cultivated. The hills in this section of the country are covered with "bunch" and other grasses, which support large herds of cattle and sheep, and for several years past the San Francisco market has been largely supplied with beef fattened on the natural grasses of these hills. Settlement has but commenced on these lands, and the Company has at least one million acres of them yet unsold.

### **Estimated Population the Lands will Support.**

From what has been stated, it will be seen that the Railroad Company has every variety of land for sale, including alluvial, bottom, prairie, grazing, wheat and vineyard lands, as well as lands covered with forests of oak and pine, and containing iron ore, granite, limestone and marble. It has been estimated that the lands of the Company, remaining unsold, will support a population of one and a half million, while the estimated present population within the limits of the railroad reservation does not exceed 30,000.

### **Markets.**

There yet remain large quantities of land to be sold, within distances from five to ten miles from railroad stations. There are also many towns and villages at various points within the reservation, and at various distances from the line of the road, so that a purchaser has no difficulty in finding land in the immediate vicinity of schools, stores, blacksmith and wagon shops. The farmer cultivating these lands has a choice among three markets, in which to dispose of his productions. He can send them to the cities and towns in his immediate neighborhood; to the gold-mining regions of California, or to the silver-bearing regions of Nevada. Wheat, barley, and various other crops, can always be sold on the land where produced to the



agents of millmen and shippers, who traverse the country for the purpose of making purchases.

### Stations on the Line of the Road.

The following table shows the various stations on the line of the road, at which the cars stop and discharge and receive passengers and freight, as also the distance of these stations from San Francisco, and their elevation above the sea :

NAMES OF STATIONS.	Total Distance from San Francisco.	Elevation — in Feet.
San Francisco .....	0	0
Oakland Wharf.....	3	0
Oakland.....	6	11
Brooklyn.....	8	12
Melrose.....	11	18
San Leandro.....	15	49
Decoto.....	26	72
San José.....	47	91
Niles.....	29	87
Pleasanton.....	41	351
Livermore.....	47	485
Altamont.....	55	740
Midway.....	63	357
Ellis.....	69	76
Bantas.....	74	30
Lathrop.....	81	26
Stockton.....	91	23
Lodi.....	103	55
Galt.....	112	50
Elk Grove.....	123	53
Brighton.....	133	51
Sacramento.....	138	30
American River Bridge.....	141	52
Arcade.....	145	55
Antelope.....	153	154
Junction.....	156	163
Rocklin.....	160	249
Pino.....	162	403
Newcastle.....	169	970
Auburn.....	174	1,363



NAMES OF STATIONS.	Total Distance from San Francisco.	Elevation — in Feet.
Clipper Gap.....	180	1,759
New England Mills.....	187	2,289
Colfax.....	192	2,421
Cape Horn.....	196	2,692
Gold Run.....	202	3,206
Dutch Flat.....	205	3,403
Alta.....	206	3,612
Shady Run.....	211	4,154
China Ranch.....	213	4,411
Blue Cañon.....	216	4,678
Emigrant Gap.....	221	5,230
Cisco.....	230	5,939
Tamarack.....	233	6,191
Cascade.....	237	6,520
Summit.....	243	7,017
Strong's.....	246	6,781
Truckee.....	257	5,846
Boca.....	265	5,533
State Line.....	276	5,138
Verdi.....	281	4,927
Reno.....	292	4,507
Vista.....	300	4,404
Clark's.....	312	4,263
Wadsworth.....	327	4,077
Two-Mile Station.....	329	4,155
Desert.....	335	4,017
Hot Springs.....	346	4,070
Mirage.....	354	4,199
White Plains.....	361	3,894
Brown's.....	372	3,925
Granite Point.....	379	3,918
Lovelock's.....	389	3,977
Oreana.....	400	4,183
Rye Patch.....	411	4,257
Humboldt.....	422	4,234
Mill City.....	433	4,228
Raspberry.....	441	4,327
Rose Creek.....	451	4,322
Winnemucca.....	462	4,332

NAME OF STATIONS.	Total Distance from San Francisco.	Elevation — in Feet.
Tule.....	468	4,315
Golconda.....	479	4,387
Iron Point.....	490	4,375
Stone House.....	502	4,422
Battle Mountain.....	522	4,508
Argenta.....	534	4,548
Shoshone.....	545	4,636
Be-o-wa-we.....	555	4,690
Cluro.....	563	4,766
Palisade.....	573	4,841
Carlin.....	583	4,903
Moleen.....	594	4,982
Elko.....	606	5,065
Peko.....	626	5,204
Halleck.....	630	5,228
Deeth.....	642	5,340
Tulasco.....	654	5,484
Wells.....	661	5,629
Moore's.....	669	6,118
Independence.....	676	6,007
Otego.....	688	6,154
Pequop.....	689	6,184
Toano.....	698	5,970
Montello.....	715	4,999
Tecoma.....	724	4,812
Lucin. ....	734	4,495
Bovine.....	747	4,347
Terrace.....	757	4,619
Matlin.....	768	4,630
Ombey.....	778	4,500
Kelton.....	790	4,222
Monument.....	804	4,223
Lake.....	812	4,223
Promontory.....	828	4,905
Blue Creek.....	838	4,600
Corinne.....	857	4,230
Brigham.....	862	4,220
Bonneville.....	871	4,300
Ogden.....	881	4,301

### Schools—Education.

Every sixteenth and thirty-sixth section of land, or one-eighteenth of all the land in California, was given by Congress to the State to be sold, and the proceeds applied to the support of public schools. In addition to this, Congress gave to California five hundred thousand acres of land for purposes of internal improvement. The proceeds of the sales of these lands are also devoted by the State Constitution to public education. The interest on the money derived from the sale of these lands, and also an annual tax levied on all property, are annually distributed to all the school districts in the State. Whenever, in a neighborhood, a sufficient number of children can be gathered to form a school, it becomes entitled to support at the public expense. The public free schools of California are the pride of its people, and are not excelled by those of any of the new States. No child need lack an education because of the poverty of its parents; the State provides free education, and establishes schools in every neighborhood. Every increase of the population but adds to the demand for the State's land, and thus increases the fund to be applied to the support of public schools. The foregoing also applies to the State of Nevada.

### Climate.

The climate is similar to that of Spain, Italy and the south of Europe. The greater part of California is within the limits of the influence of the trade winds. There is no rain in summer from May until November. The period from November till May is called the rainy season; for in the great valleys and the lower hills, at the base of the Sierra, this season cannot be called winter. In the valleys the average annual fall of rain is twenty-five inches; this gradually increases, as the slopes of the mountains are ascended, to sixty inches. During the twenty-two years the Sacramento valley has been inhabited by Americans, snow has covered the ground but three times, and this had disappeared by noon of the day on which it fell. The rainless summers give every facility to the farmer in gathering his crops; the hay is cut and left to cure on the ground as it fell from the mowing machine; the wheat or barley is cut, and permitted to remain for days or weeks before it is gathered and threshed, with the certainty that there will be no rain to injure it. Plowing and sowing of grain com-

mence with the first rains, in November or December, and by the first week in June the crop is ripe. Grapes ripen; the earlier kinds in July, the latest by the last week in October. In the valleys the heat of the midsummer sun is oppressive at noon; but the mornings, evenings and nights are cool and bracing. There are no prevalent diseases. In some of the low lands, overflowed by the rivers, and in places where the reservoirs for the supply of water to the miners are constantly emptied and refilled, exposing the bottom to the sun, there are, in the autumn, some forms of miasmatic disease. The prairie land, the rolling lands and hills, as well as the mountains, and valleys among the mountains, are free from any peculiar disease, and their climate is considered conducive to health, especially to persons of weak lungs.

**Counties in which the Company owns Lands—Agricultural Productions, Etc.**

The Railroad Company has lands for sale lying in the counties of Sacramento, Placer, El Dorado, Sutter and Nevada, of California, and in many counties in the State of Nevada. Of these *five* counties in California, where large quantities of land have already been sold by the Company, the clearest exhibit of their soil and climate, and of their varied agricultural productions, will be made by the following statistics, taken from the sworn returns of the Assessors of these counties to the Surveyor-General of the State for the years 1872, 1873, and 1874. In these counties there were in those years:

	1872.	1873.	1874.	
Acres inclosed .....	664,714	709,884	.....	
“ cultivated .....	235,289	239,955	290,496	
Wheat .....	887,730	1,225,472	1,511,821	Bushels.
Barley .....	597,447	622,007	822,856	“
Oats .....	23,966	57,969	23,199	“
Rye .....	3,493	3,717	.....	“
Indian Corn .....	7,883	90,268	106,826	“
Buckwheat .....	993	3,230	7,300	“
Potatoes .....	14,914	7,089	4,765	Tons.
Sweet Potatoes .....	1,691 $\frac{1}{2}$	3,798	2,543	“
Onions .....	5,970	7,399	11,054	Bushels.
Beans .....	12,732	18,060	36,652	“
Peanuts .....	4,026	4,421	11,000	Pounds.

	1872.	1873.	1874.	
Castor Oil Beans.....	100,000	35,000	.....	Pounds.
Hops.....	178,143	182,810	376,500	"
Butter.....	282,061	338,671	536,775	"
Cheese.....	65,420	75,029	66,500	"
Honey.....	18,690	9,920	.....	"
Wool.....	569,412	591,878	.....	"
Turnips.....	121	omitted	.....	Tons.
Pumpkins and Squashes.....	2,214	omitted	.....	"
Sugar Beets.....	317	12,655	3,020	"
Hay.....	28,983	61,949	76,585	"
Horses.....	23,182	21,445	20,167	
Mules.....	1,447	1,303	1,233	
Cows.....	20,097	20,176	17,582	
Calves.....	18,541	16,707	8,567	
Beef Cattle.....	15,468	14,012	11,625	
Oxen.....	1,227	1,124	1,039	
Sheep.....	220,280	235,856	209,969	
Angora and Cashmere Goats....	68	2,483	4,861	
Hogs.....	21,715	35,822	19,560	
Domestic Fowls.....	105,917	omitted	.....	
Hives of Bees.....	2,484	omitted	920	
Apple trees.....	282,656	311,795	285,256	
Peach.....	192,474	189,396	205,956	
Pear.....	61,064	81,288	73,742	
Plum.....	40,258	49,846	29,372	
Cherry.....	19,254	21,375	27,249	
Nectarine.....	7,201	7,557	5,814	
Quince.....	8,078	8,362	4,581	
Apricot.....	16,531	17,990	23,242	
Fig.....	10,192	10,588	9,486	
Lemon.....	721	951	796	
Orange.....	1,180	1,191	987	
Olive.....	164	278	207	
Prune.....	1,200	1,693	4,966	
Mulberry.....	168,784	151,543	162,108	
Almond.....	6,315	6,441	8,893	
Walnut.....	52,702	51,861	34,771	
Raspberry and Gooseberry bushes	96,719	128,182	.....	
Strawberry vines.....	665,210	867,352	.....	
Grape vines.....	5,139,422	5,527,739	.....	
Wine.....	633,547	470,807	432,720	Gallons.
Brandy.....	39,027	42,200	14,820	"
Steam Grist Mills.....	7	7	4	
" " " Runs of Stone.	26	27	19	
Water Power Grist Mills.....	1	2	2	
" " " Runs of stone	1	3	2	
Flour.....	268,830	230,700	213,670	Barrels.
Indian Corn made into Meal....	17,700	37,570	30,100	Bushels.



	1872.	1873.	1874.	
Saw Mills, Steam.....	44	45	51	
“ “ Water.....	11	16	20	
Lumber Sawed.....	39,382,900	66,782,900	86,200,000	Feet.
Shingles.....	8,200,000	16,338,000	20,503,000	
Broom Corn.....	198	1,144	.....	Acres.

### How Lands are Sold.

The price fixed by the Company for the best class of agricultural, wheat, orchard, dairy and vineyard lands, is from \$2.50 upward per acre according to quality and location; oak wood land \$5.00 per acre, and first-class pine timber land \$10.00 per acre. With a desire on the part of the Company to dispose of its lands to men who will cultivate the soil, it sells its agricultural lands on a credit of five years if desired, the purchaser paying at the time of the purchase twenty per cent. of the principal, and the remainder bearing interest in advance at ten per cent. per annum. A TRACT OF LESS THAN EIGHTY ACRES WILL NOT BE SOLD ON CREDIT. Oak and pine lands are required to be paid for at the time of purchase. At the Land Office of the Company in San Francisco are maps showing the route of the road, the counties through which it passes, the rivers and streams that flow through the land, and the United States surveys designating the lands granted to the Company and those retained by the government; also the towns, villages and settlements within the railroad grant. A person desiring to purchase is directed to points near the line of the road where he can examine the kind of land desired. After selecting the land, if he wishes to pay for it in full at time of purchase he can do so, and takes a fee-simple deed under the United States patent. A purchaser from the Company can buy any quantity of land, or as many sections as he may desire; but, as has been explained, each odd section being surrounded by four even numbered sections, which are retained by Government for settlers, no compact body of land can be sold of greater extent than one section of 640 acres. Supposing the purchaser desires to buy a quarter section—a tract of half a mile square, containing 160 acres—and that he wishes this land on the credit

allowed by the Company; the manner of selling will be explained by the following

EXAMPLE :

160 acres (say at \$5) is.....	\$800 00
20 per cent. of \$800, cash down, is.....	160 00
	<hr/>
Remainder, payable within five years.....	\$640 00
The first payment would, therefore, be 20 per cent., as above.....	\$160 00
First year's interest on \$640, as above, in advance....	64 00
	<hr/>
Total.....	\$224 00

The other payments would be the \$64, the annual interest in advance, and at the end of five years, \$640, the remainder of the principal, and three dollars for the expense of deed.

At the time of making the payment of \$160, and the first year's interest, \$64, he would receive a contract for a deed from the Company, signed in duplicate by him and the proper officers of the Company, in which he would agree to pay the yearly interest and the balance due at the end of five years, and the Company agreeing on its part to give him a fee-simple deed when the balance was paid. At any time the purchaser desires, he is allowed to pay the balance due and take his deed, thus stopping the payment of interest; the Company will not, however, receive it in installments. Practically but few persons avail themselves of the five years credit. Although purchases are frequently made on credit, yet in most instances by the second or third year they are enabled, from the sale of their crops, to pay the remainder due and receive their final deeds.

#### Advantages to the Purchasers of Railroad Lands.

The purchasers of railroad lands have many advantages over those purchasing from the Government, some of which can be best explained by stating the mode in which the Government disposes of its public lands—the even numbered sections—within the railroad reservation. A person, to acquire title from the Government by pre-emption, must first go upon the land, commence its cultivation and erect a dwelling—

house; he then files in the United States Land Office his "declaratory statement;" that is, a document setting forth that he has selected a certain piece of land, describing it, together with the date of his settlement, the fact that he is a citizen or has legally declared his intention to become a citizen, his age, etc. After three months he must appear at the United States Land Office, with two witnesses, where a trial is had, and proof made on oath before the Land Officers that he has complied with all the provisions of the pre-emption law. If the law has been complied with he then pays \$2.50 per acre, and a receipt is given to him; in a year or two a patent is received, and he returns his receipt and obtains the patent for his land. No man can obtain from the Government, by pre-emption, more than 160 acres of land, and having received this, his privilege is exhausted.

There is one other way by which a person can obtain lands from the Government—on even numbered sections within the railroad reservation—and that is, by filing a homestead claim on eighty acres. As in the case of pre-emption, he must erect a dwelling, live on and cultivate the land; he must then file in the United States Land Office his declaration of homestead, setting forth substantially the same facts as in the case of pre-emption. On the day he files he receives a homestead certificate. If he continues to live on the land and cultivate it for five years from the day of filing, he can, after that time, make proof of the facts as in the case of pre-emption, and if the law has been complied with, he returns his certificate, and in time will receive a patent, without other expense, except the fees of the officers and the fees of an attorney, if necessary that one should be employed. A pre-emption cannot be for more than 160 acres, nor a homestead for more than 80 acres on Government land within the railroad reservation. Neither the pre-emption nor homestead can be abandoned, sold, mortgaged, or leased, until after the patent is issued. On the other hand, the purchaser from the railroad is not limited as to quantity, and when the money is paid and the deed issued, he can do as he pleases with the land—it is his in fee simple. There are no complicated laws or rules—he selects his land, pays for it and takes a deed or buys on credit and takes a contract for a deed, which is assignable. In either case he does with the land as he deems proper—he may sell, lease, reside on the land, or reside elsewhere, or he may

let it remain to increase in value by the settlement of the country about it. Many purchasers of railroad lands do not build upon the land purchased, but erect their dwellings upon the adjoining even sections, thus taking advantage of the privilege granted by Government, and obtaining in one body a larger tract than could otherwise be acquired.

### **The Policy of the Company in the Sale of its Lands.**

The policy of the Company is, and has always been, to sell its lands at low prices and upon easy terms of payment. Its directors believe its best interests are promoted by selling its lands near the line of the road to men who will personally cultivate the soil, and who will own the land they cultivate. Any man coming to California, who can and will labor, may be certain of employment, and if he so desires, he can, with the proceeds of seven months' labor, become the owner of eighty acres of the finest wheat land in the world, in a climate that for salubrity has no equal; in a State where all children are educated in free schools at the public expense, and where slavery never had existence; among a people who honor labor, and whose laws give ample protection to life and property.

### **General Remarks.**

The information contained in the following pages regarding the lands of the California and Oregon Division of the Central Pacific Railroad, and the remarks concerning "Markets," "Wool," "Policy of the Company," "Grading of Lands," "Applications," etc., may be considered as applying also to these lands. The Central Pacific Railroad Company has adopted a uniform system for the sale of *all* the lands under its control.

All communications in relation to the lands of the Company, if addressed to B. B. Redding, Land Agent Central Pacific Railroad Company, corner of Fourth and Townsend streets, San Francisco, California, will be promptly answered.



## Lands of Central Pacific Railroad.

### CALIFORNIA AND OREGON DIVISION.

Under the Act of Congress, approved July 25th, 1866, the California and Oregon Railroad Company has a grant of lands from the United States, consisting of all vacant odd numbered sections within twenty miles on each side of its road, and where the odd numbered sections have been taken by pre-emption or otherwise, the Company has the right to select other vacant odd numbered sections as indemnity, within thirty miles on each side of its line. This road commences at Roseville, in Placer County, California, on the line of the Central Pacific Railroad, and extends north, by way of Marysville, in Yuba County, through Chico, in Butte County, to Red Bluff, in Tehama County, and so on north, through Shasta and Siskiyou counties, to the State of Oregon. This road is now completed to Redding, in Shasta County, and is being rapidly extended.

The route of this road is nearly parallel to the general course of the Sacramento River, and its grant embraces some of the finest bottom lands in the Sacramento valley.

The grant lies in the counties of Placer, Sutter, Yolo, Yuba, Butte, Colusa, Tehama, Shasta, Plumas and Siskiyou.

The lands are diversified in character, consisting of plains, alluvial bottoms, rolling prairie, low hills, and mountains.

The plains and rolling prairie contain large quantities of rich agricultural lands, adapted to the growing of wheat and other cereals, which, when properly cultivated, yield most abundantly; also, to the culture of grapes, apples, peaches, apricots, plums, nectarines, and other fruits, which are produced in endless variety, of most excellent quality, and in large quantities. The portions not suitable for farming purposes are covered with wild oats, bunch grass, and a variety of other grasses, affording rich and abundant pasturage.

The alluvial bottoms in the Sacramento valley, as also in the smaller valleys of the tributaries of the Sacramento River, are very rich. Here is a broad scope of the best grain-growing lands in this State. Almost every species of agricultural productions can be raised on these lands. Here can be made large and prolific gardens, orchards, and vineyards. The pastures on the low lands for cows are rich, green, and succulent, giving opportunity for profitable employment in making



cheese and butter. Swine thrive and fatten on the tule roots growing on the low lands, which, furnishing a cheap and nutritious food, enables the farmers to raise these animals with but little expense.

The low hills furnish also pasturage of excellent quality for sheep and cattle, while, for the culture of grapes and fruits of almost every kind, the soil is unsurpassed. Nearly all the grapes from which wine is made in California are grown in the foot-hills.

The mountainous districts contain a heavy growth of coniferous forests, comprising sugar and yellow pine, red spruce, cedar, fir, etc., also a heavy growth of oak timber. There are many fertile and well-sheltered valleys and mountain meadows, admirably suited for agricultural and grazing purposes. Most of these valleys are covered with a luxuriant growth of natural grasses, the adjacent mountains in very many places also affording much pasturage. The greater part of these lands is generally well watered.

### Markets.

There is always a ready market for all farm and agricultural products at Marysville, Sacramento, San Francisco, and in the towns and villages of the mining districts.

### Wool.

Among these lands are some of the best sheep ranges in the world. In 1871 the product of wool in California was 24,000,000 pounds. In 1872 it was about 25,000,000 pounds, and in 1873 it was over 32,000,000 pounds. In 1876 it was estimated at 56,000,000 pounds, and valued at \$9,000,000. Many persons in this State, who commenced this business in absolute poverty, have in a few years grown wealthy. The climate is peculiarly favorable to sheep. They need neither shelter nor cultivated food—at least, most of them never receive either. Sheep husbandry in California will always pay better than in any other State in the Union, for here the weight of the animal is ten per cent. greater than in the Eastern States, while the fleece is twenty per cent. larger and the increase one hundred per cent. more; besides, the sheep generally live longer. There is no disease among them except scab, and that is never fatal. If the exemption from disease, the more rapid increase, the greater weight of fleece and

mutton, the saving in buildings, sheds, and in cultivated food, and the difference in the cost of the pasture land, be taken into consideration, there is a large total in favor of the wool-grower in California.

### Stations on the Constructed Line of the Road.

NAMES OF STATIONS.	Total Distance from San Francisco.	Elevation — in Feet.
Junction (on main line, C. P. R. R.).....	156	163
Lincoln .....	166	161
Ewens .....	170	113
Sheridan .....	174	113
Wheatland .....	177	84
Reeds... ..	183	69
Yuba .. ..	188	68
Marysville .....	190	67
Lomo .....	197	71
Gridleys .....	207	97
Biggs .....	211	98
Nelson .....	221	124
Durham .....	227	161
Roble .....	229	176
Chico .....	233	193
Nord .....	240	153
Anita .....	243	162
Soto .....	248	186
Vina.....	252	212
Sesma.....	260	240
Tehama.....	261	222
Red Bluff.....	273	307
Hooker... ..	283	545
Buckeye.....	288	432
Cottonwood .....	290	421
Anderson .....	296	432
Clear Creek Town.....	303	467
Redding .....	307	558

### Policy of the Company—Applications for Land and Privileges Gained Thereby.

As soon as a section of twenty miles or more of the railroad is completed, equipped, and in operation, it is examined

by the United States Railroad Commissioners, who make a report to the Government. If found to be constructed in all respects as required by law, the section is accepted and the lands listed and patented. When the patent is received, the lands are offered for sale. This road is now constructed to Redding, which is situated 170 miles north of Sacramento, and about six miles east of the town of Shasta. A portion of the road has already been examined, and it is expected in a short time that the entire line, as far as completed, will be examined and accepted. Some of the lands, as far north as Vina, are now offered for sale. Applications to purchase are received and filed in the Land Office of the Company, and blanks will be furnished for that purpose; but with the understanding, however, that no vested right shall be conferred thereby. It is merely a notice that the applicant wishes to purchase. The policy of the Company has always been, and is now, to encourage the settlement of its lands in small tracts, by persons who will live on and cultivate them. To this end settlers are invited to make applications to buy and to occupy and put to use the vacant lands until such time as they shall be ready for sale. If the settler desires to buy, the Company gives him the first privilege of purchase at the fixed price, which, in every case, shall only be the value of the land, without regard to the improvements. It must be understood that the application of a speculator, or of a person who does not improve or occupy the land, will not, although received first, take precedence or priority of that of the settler whose application may, perhaps, be filed last of all. The actual settler, in good faith, will be preferred always, and the land will be sold to him as against every other applicant. The Company also wish it to be known that a mere application to buy land, unaccompanied by actual improvement or settlement, confers no right or privilege which should prevent an actual settler from taking it, if vacant, into possession, and cultivating and improving it. In filling in the blank application, persons are requested not to put the lands in two or more townships in the same application. Use a separate blank for each township.

When there are two or more applicants for the same tract of land, an adjudication of their respective claims will be made by the Land Agent, upon due notice given to the parties, and the right to buy, at the graded price, will be awarded to the applicant who shall be deemed to have the most equitable

claim. Should the applicants, or either of them, pay no attention to the notice, or fail to be present, in person or by representative, at the time and place mentioned in it, they shall be considered to have abandoned their applications, and all right or claim to purchase ; and the land will then, at the option of the Railroad Company, be open for purchase by any person to whom the Company may choose to sell.

#### **Grading Lands and Manner of Ascertaining their Value.**

When lands are ready to be sold, the Company sends a man well acquainted with the quality of soil and skilled in determining the kind of agricultural product to which it is best adapted, as also in determining its true market value, to look at the various sections and tracts. After personal examination, he grades the land as being first, second, or third quality of farming, vineyard, timber, or grazing land, and reports the value of each piece. His report is examined, and, if found correct, a price is established. The price is generally that of unimproved land of the same quality in the immediate vicinity at the time of the grading. In ascertaining the value, any improvements that a settler or other person may have on the land will not be taken into consideration, neither will the price of the land be increased in consequence of them. Further, there is but one price—that fixed by the Company—and land will be sold at that rate to those who in equity have the best right to buy, even if others should offer more per acre than the amount asked. Settlers are thus assured that, in addition to being accorded the first privilege of purchase at the graded price, they will also be protected in their improvements.

#### **Settlement before Patent.**

The Company invites settlers to go on the lands before patents are issued or the road is completed ; and intends, in such cases, to sell to them in preference to any other applicants, and at prices based upon the value of the land without the improvements put upon it by the settlers. It makes no definite contract with any individual upon this basis, but it treats all fairly. It will not sell to somebody else, merely because the latter offers a higher price. It will not sell to any one land that may be required by it for railroad purposes, such as places for depots, stations, etc., or for town sites. Any person desiring to settle upon vacant railroad land, after survey



and before it is patented, should address a letter to the Land Agent of the Company, requesting a copy of a blank application for the purchase of land.

If the settler goes upon the land before survey, he should describe it as nearly as possible, and so soon as the survey is made send the description to the Land Agent.

An application for land confers no vested right or privilege on the applicant. It is merely a notice that he wishes to buy.

The filing of an application does not carry with it the right or permission to cut wood or timber from the lands of the Company, except for firewood for the domestic uses of the actual occupants of the tract applied for, or for fencing and improving it.

Applicants, or other persons, who shall be detected in cutting wood or timber on railroad lands, except for the purposes above specified, or in selling or carrying it away, will be prosecuted with the utmost severity of the law.

#### **No Sale Before Patent.**

The general rule of the Company is to sell no land before a patent has been issued to the Company. This protects the purchaser against the danger of getting a bad title, and the Company against the suspicion of taking advantage of the ignorant.

#### **Payment in Coin.**

All sales are made for gold coin, which may be paid in person or sent by express or by a banker's check on a bank in San Francisco. The Company does not deal in exchange nor take any risk of loss in transmission. The collection of orders upon business men in San Francisco, or of checks upon city banks drawn by farmers or country merchants, is often attended with much delay and vexation, and therefore such orders or checks will not be received; but a check drawn by any solvent country bank upon a San Francisco bank with which it has funds, is good. No paper is made out until after payment. No contract is made to accept work of any kind as payment. If the purchaser is in the employment of the Company, he should get his money and come with it to the Land Office. It is useless for him to bother with offers to grade, cut wood, or do something in compensation for land. The departments have separate accounts.



The Company does not give free transportation to persons who wish to examine or buy, or who have bought land. Nor after purchase does it carry their building material, furniture, or cattle free. In this, as in other respects, the land and transportation departments of the Company manage their business on the cash basis and on separate accounts.

#### When Time Allowed.

Land is sold on contract, allowing time for payment of a part of the purchase money—if the tract be 80 acres or more, and if it have no timber. If it be less than 80 acres, or if it be covered with timber, no sale will be made except upon full payment of cash before the execution of any paper. The rule of the Company is to make no contracts for sale of land before the patent for it has been received.

#### Terms of Time Sales.

All contracts for the sale of land on time are made in uniform manner. The terms are the same in every case. The purchaser must pay one-fifth of the price, and also interest for one year on the balance, before he can get a contract; he must then pay the interest in advance at the beginning of each subsequent year, till the fifth year is up, and then pay his principal, and take his deed. No installments are accepted; but if his interest is not delinquent he can at any time pay the principal, and get his deed. This system protects the Company against complication of accounts, gives the purchaser an abundance of time for making payments, and enables him to select his own day within five years for closing up the transaction. As stated, payment in full of the purchase money can be made at any time; but after interest has been paid, no part of it will be refunded. This is done in order to avoid confusion in keeping the accounts. The purchaser can draw interest on his money in a savings bank till the end of the year, if he sees fit. No longer credit than five years is allowed in any case.

**SELECT FOR YOURSELF.**—No officer of the railroad selects land for another person, nor could such selection be made without exposing the Company to vexatious complaints. Everybody who intends to buy should, if possible, visit and examine the land, for nobody knows so well what he wants,

or at least nobody can safely assume the responsibility of deciding for him.

ADVICE TO EMIGRANTS.—The California Immigrant Union, No. 5 Market Street, San Francisco, gives the following advice to emigrants :

1. Buy your tickets for passage on railroad or steamboats only at the office, before starting. Many of the runners who offer tickets for sale in the streets are swindlers. If you intend to go in a steamer or ship, examine the vessel before getting your ticket, and engage a particular berth or room in a part of the vessel that is clean, well ventilated and just comfortably warm.

2. Never show your money nor let any stranger know that you have any. Thieves prefer to rob emigrants, who generally carry money with them, and cannot stop to prosecute them, and have no acquaintances to aid in the prosecution. Do not mention the fact that you are an emigrant to persons who have no business to know it.

3. Never carry any large sum of money with you. You can always buy drafts at banks, and if you are going to a strange place, you can give your photograph to the banker to forward to your destination, so that you can be identified without trouble when you want to draw your money.

4. Avoid those strangers who claim to be old acquaintances, and whom you do not recollect. A certain class of thieves claim the acquaintance of ignorant countrymen whom they want to rob.

5. Do not drink at the solicitation of strangers. The first point of the thief is to intoxicate or drug his victim.

6. Do not play cards for money with strangers. In many cases they confederate to rob emigrants.

7. Travel in company with old friends, if possible, and do not leave them. Thieves prefer to take their victims one at a time.

8. If you see anybody pick up a full pocket-book, and he offers it to you for a small sum ; or if you see some men playing cards, and you are requested to bet on some point where it seems certain that you must win ; or if you see an auctioneer selling a fine gold watch for five dollars, don't let them catch you. Emigrants are systematically swindled by such tricks.

9. If, when you arrive in a strange town, you want information and advice, you can always get it by applying at the right place. First, apply at the office of the Immigration Society, if there is one. If you are a foreigner, you will probably find in the large cities a consular office or a benevolent society of your countrymen, and you can apply there. Usually there are attentive and polite men at the police office. Public officers generally in the United States are ready to assist and advise strangers.

10. Before starting from home, carefully read all the accessible books about the State or Territory to which you intend to go ; and when you arrive, go to some place where you can find old friends, if you have any. If you are poor, commence work immediately, but do not be in a hurry to buy land, unless with the approval of men whom you can trust. Take a month or two to get information about the country. Advice about the purchase of land is often given with corrupt motives. It is very seldom that anything is lost by a delay of a week or two in closing a bargain for land, though the seller will frequently say that somebody else is just going to take it. But do not delay to purchase, if you have the means, for more than two or three months ; it is always cheaper for you to live on your own land.

11. Engage in some business with which you are familiar ; and if its conditions are different from those to which you are accustomed, commence slowly, so as to learn at little expense. The agriculturist from Europe or the Atlantic States must learn anew many things in his business here.

12. Never fear failure at farming on your own land, if you live economically, work hard, and select your place well.

13. It is better to be very poor for a few years on your own land than to be moderately poor as a tenant for others.

14. In selecting a home, look ahead. Care more for ultimate than for immediate success. Wherever there is a large district of fertile soil with a good climate, you can confidently settle down. It must fill up, and the land must rise in value. The fewer the people the better opportunity you have to select the most desirable spots, and when immigration comes in, the greater will be the relative increase of population.

**General Remarks.**

All that has been written regarding the lands of the Central Pacific Railroad (main line) and the manner of acquiring title to them, as also respecting Climate, Vineyards, Schools, Education, etc., and all other matters (excepting the grant to the Railroad and its lands in the State of Nevada), may be taken as applying generally to ALL the lands of this Railroad.

All communications addressed to B. B. Redding, Land Agent Central Pacific Railroad Company, corner Fourth and Townsend streets, San Francisco, California, will receive prompt attention.





# RELATIONS

BETWEEN THE

## CENTRAL PACIFIC RAILROAD COMPANY

AND THE

## UNITED STATES GOVERNMENT.

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### SUMMARY OF FACTS.

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1889.

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SAN FRANCISCO:

H. S. CROCKER & CO., STATIONERS AND PRINTERS.

1889.



View of Saving to Government in Transportation Charges on Central-Union Pacific Railroad,  
from completion of road to December 31, 1885:

Charges to United States for transportation of:	
Freight, supplies, munitions of war, etc. . . . .	\$ 5,740,753
Passengers and troops . . . . .	4,616,953
United States mails . . . . .	10,606,507
Total charge for railroad transportation	\$ 20,963,313
Amounts for same service at rates paid prior to railroad:	
Freight, supplies, munitions of war, etc. . . . .	\$ 61,161,307
Passengers and troops . . . . .	49,178,967
United States mails (see Note) . . . . .	49,970,780
Total cost at ante-railroad rates . . . . .	\$160,311,054
Amount saved for United States, 1869-1885 . . . . .	\$139,347,741
United States bonds and accrued interest to date, less amounts repaid by companies . . . . .	\$ 86,685,907
Amount saved in excess of bonds and interest	\$ 52,661,834

NOTE.—The charges for transportation services rendered by the railroads have not been paid by the Government, but are retained to apply on the bonds and interest.  
The weight of mails carried by stages just prior to the completion of the railroad amounted to about 1,000 pounds daily. On the railroad this has increased to 30,000 pounds. In the sum stated above, no estimate is made for this increase in weights to show the amount saved.



LETTER OF THE HON. LELAND STANFORD.

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CENTRAL PACIFIC RAILROAD COMPANY.  
OFFICE OF THE PRESIDENT.

SAN FRANCISCO, CAL., September 1, 1889.

MR. G. L. LANSING,  
*Secretary and Controller,  
Southern Pacific Company,  
San Francisco,*

*Dear Sir:* From the records to which you have had access during your long connection with the Central Pacific Railroad and its affiliated lines, and from the public documents of the Government, will you please prepare a summary of facts as to the relations between this company and the United States, particularly on the following points:

FIRST—As to the obligations of both parties under the several Acts of Congress comprising the contract between the Government and the company, and whether they have all been observed.

SECOND—As to the benefits to both the United States and the company which were to follow on the completion of the road, and how they have been realized.

The affairs, records and property of this company have annually, since 1878, been examined by the United States Commissioner of Railroads, assisted by his engineers and accountants; and the Pacific Railway Commission, appointed under the Act of Congress approved March 3, 1887, have made an exhaustive examination into the company's entire history and affairs. The reports of these Government officers conclusively show that all of the legal obligations to the Government, arising out of the loan of bonds or otherwise, have been fully kept and discharged



on the part of the company. The reports also show that the legal obligations of the Government to the company have not been fully complied with.

But beyond these obligations on either side, which were named in the Contract Acts and in the laws relating thereto, there were certain implied promises of benefits to be received on either side, *on which the terms of the contract as to the loan of bonds, as well as the manner and time of their payment, were based.* The facts as to these promises and the way they have been fulfilled must receive full consideration in any fair plan that may be proposed looking to the settlement of the affairs between the company and the United States. A summary of these facts taken from official sources will furnish desired information in a convenient form for the purpose of considering any such arrangement.

Yours very truly,  
LELAND STANFORD,  
*President.*

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SAN FRANCISCO, October 15, 1889.

HON. LELAND STANFORD,  
*President, Central Pacific Railroad Company,  
San Francisco,*

*Sir:* In conformity with the request contained in your letter of September 1st, I beg to hand you herewith a summary of facts compiled from official sources, as to the relations between the Central Pacific Railroad Company and the United States Government.

Very truly yours,  
G. L. LANSING,  
*Secretary and Controller.*

## CONTENTS.

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- I. THE LEGAL OBLIGATIONS AND THE MANNER IN WHICH  
THEY HAVE BEEN OBSERVED.
- II. THE BENEFITS PROMISED AND HOW THEY HAVE BEEN  
REALIZED.



# The Central Pacific Railroad Company

—AND—

## The United States Government.

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### SUMMARY OF FACTS,

*Showing all Obligations on the part of the Company  
fulfilled, and all Benefits expected by the  
Government realized.*

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#### I.

### THE LEGAL OBLIGATIONS AND THE MANNER IN WHICH THEY HAVE BEEN OBSERVED.

The relations between the Central Pacific Railroad Company and the Government are twofold. There are legal obligations on either side, which are specified in the several Acts of Congress; and there are equitable considerations which are evident only on an examination of the history and the causes which led to the passage of the Acts. The legal obligations have recently been fully examined into and reported on by the United States Pacific Railway Commission, which was appointed by the President, pursuant to the Act of Congress approved March 3, 1887. Their report and the testimony on which it is based comprise nine printed volumes octavo, which, by its size, precludes its ready use. A summary of this report as to the Central Pacific will furnish in brief form a view

of the facts as to the legal obligations of the company and the United States under the several Acts of Congress, and will show that they have been kept fully and in good faith by the company, but that they have not been complied with in all respects by the United States.

#### REPORT OF THE INVESTIGATING COMMISSION.

The Commissioners were appointed to make an investigation of the books, accounts and methods of the Pacific railroads which have received aid from the Government in bonds, with a view of reporting to Congress a plan which should effect a final settlement between the companies and the United States. They secured the assistance of a large force of accountants and a staff of engineers. Their labors commenced immediately upon their appointment, April 15, 1887, and concluded only on the transmission of their report to the President on December 1st. On January 17, 1888, the President transmitted the report to Congress, together with the accompanying reports of the accountants, engineers, and the testimony. The commission conducted its principal examinations relative to the Central Pacific Railroad Co. in New York and San Francisco; "but it also examined witnesses at a vast " number of local points for the purpose of ascertaining " the relations existing between the different railroads " and the local communities, and of giving full and abundant opportunity to all persons who had business relations " with these roads to state their views and make known " their complaints, if any " (report, page 4).

The accountants of the commission established themselves in the general offices of the company in June, and did not conclude their labors there until October. The Chief Accountant of the commission, Mr. Richard F.



Stevens, personally directed the examination of this company's affairs. His staff consisted of seven expert accountants. In his report to the commission (vol. 8, p. 4525), Mr. Stevens says: "On my arrival in San Francisco I presented my credentials to Senator Stanford, the President of the company. He informed me that the company was only too anxious to have a full examination of the affairs of their offices, and referred me to the Secretary of the company, and requested him to give me every facility in his power. It gives me pleasure to state that such request was heartily, thoroughly and fully complied with by the Secretary, who afforded me every facility to examine all the books and vouchers that were under his control."

The Engineer of the commission, with his assistants, made a thorough and detailed examination of all the company's lines and the property connected therewith. For this purpose every facility was afforded him by the company, its officers and employés. The commission itself spent a month in San Francisco, and much time in New York and other places, examining officers and employés of the company. During their sessions in San Francisco, the resources of the general offices were placed at their disposal. Books, records and vouchers were produced as called for and the officers of the company allowed no other matters to interfere with the business or requirements of the commission.

The Act of Investigation was subdivided by the commission into fifty-eight headings or subjects for investigation and report. Of these, twenty-three consist substantially of charges or allegations that the railroads had violated their obligations or failed in their duty to the Government. Nineteen relate to the value of the property, the holdings of stock, salaries paid officers, payments

Subjects of inquiry specified by Act.

to influence legislation, and other miscellaneous subjects tending to furnish general information concerning the companies, or inserted for political effect, but containing no charge either that the Government or the companies had failed in any undertaking towards each other. Six are devoted to instructions to the commission; and the remaining ten consist substantially of allegations that the Government has failed to act towards the companies with fairness, or that the latter have experienced unusual difficulties and that the former has realized unusual benefits, all of which deserve consideration in any equitable plan of settlement which Congress may propose.

As to the first and last of these groups,—the charges against the companies and equities in their favor,—the following review of the report shows: First, as to the implied assertions contained in the twenty-three subdivisions of the Act, that this company has not kept and performed its obligations to the Government, not one is true; Second, as to the implied assertions contained in the ten subdivisions of the Act, that the company had overcome at great cost unlooked-for and extraordinary difficulties, to the great advantage and profit of the Government, and that the latter had failed to keep its obligations and act with fairness towards the company, all are true.

#### REVIEW OF CHARGES AGAINST THE COMPANY.

By the terms of the contract, as stated in the Acts of 1862 and 1864, this company was required to pay annually to the United States, on account of the bonds and interest thereon, five per cent of the net earnings of the aided road. By the terms of the Thurman Act (May 7, 1878), this annual requirement was changed to twenty-five per cent of the net earnings. These requirements have been fully

Company's  
obligations all  
kept.

Obligations of  
Government  
not kept.

and promptly paid by this company to the United States as the amounts were ascertained to be due by the Government officers appointed for that purpose. Nevertheless, insinuations and charges have been frequent at different times from irresponsible sources, that these requirements have not been kept by the company, or that the net earnings have been continually stated at less than they actually were, thus defrauding the Government of twenty-five per cent of the amounts so understated. Eight subdivisions of the Act of Investigation relate to this subject. They practically allege that the company has violated its obligations as to these payments by all of the following practices: That the books and accounts have not been so kept as to show the net earnings of the aided line separately from the non-aided lines. That earnings have been diverted from aided lines to less productive branches through constructive mileage allowances, or average mileage allowances, which practices have resulted unfairly to the interests of the United States. That earnings of the aided road have been unlawfully reduced by discriminations in favor of unaided lines, by diversion of traffic which could have been done by the aided line, by way of rebates, overcharges, pooling arrangements, etc. And, finally, that there is money due the United States from the company account of mistaken or erroneous accounts, reports and settlements. In answer to these charges, the commission have found the facts to be as follows:

“The books of the company are so kept as to show the  
 “net earnings of the aided portion. As a matter of fact,  
 “the Commissioner of Railroads has stated and settled  
 “these earnings for many years past, and has had no diffi-  
 “culty in ascertaining their amount.  
 “There has never been a diversion of earnings of aided  
 “roads to less productive branches through constructive

Charges  
 refuted by  
 Commission.

“ mileage allowances or average mileage allowances  
 “ between aided and non-aided roads, or parts of roads.

“ No evidence has been presented to the commission of  
 “ any discrimination of rates in favor of unaided as against  
 “ aided roads.

Diversions of  
 traffic for pub-  
 lic advantage.

“ The evidence discloses that traffic has been diverted  
 “ in a great variety of instances from the Union Pacific  
 “ and Central Pacific Railroads to other lines. As illus-  
 “ trations of such diversions, the commission refer to the  
 “ following: The Southern Pacific, the California Pacific  
 “ and the Oregon Short Line. It would have been pos-  
 “ sible to have carried the traffic which was forwarded  
 “ over the roads named by the Union Pacific and Central  
 “ Pacific route. In the judgment of the commission, the  
 “ controlling motive which has led to this alteration in  
 “ the transit of freight has been the question of con-  
 “ venience and public advantage. It has not arisen from  
 “ the intention to reduce the net earnings applicable to  
 “ the percentage due to the United States. In the report  
 “ of the Postmaster-General, it is stated that this same  
 “ diversion is practiced by his department, and that he  
 “ selects the best and quickest routes, because he thereby  
 “ promotes public convenience. \* \* \* It appears to  
 “ us that this question of the diversion of traffic must be  
 “ regulated by the interests and demands of the people  
 “ who use the railroads. Trade will always find the easiest  
 “ and most natural channel.”

Payments for  
 rebates, pools,  
 etc.

As to rebates, overcharges, pooling arrangements, etc.,  
 they state: “ An overcharge occurs when a freight bill  
 “ is erroneously stated at a larger amount than proper  
 “ by reason of overweight, overmeasurement or mistake  
 “ in the rate charged. The practice is to refund to  
 “ the parties against whom a mistake has been made  
 “ the amount of the overcharge on a proper voucher. A

“rebate is an agreed reduction from the ordinary open rate. It is adjusted in the same way. All overcharges, rebates and pool balances which form part of the many millions of dollars which have been paid by the bond-aided roads in the adjustment of these matters have been actually and in fact paid out by these companies. No evidence was produced before the commission of any pretended or fraudulent vouchers relating to the matter. As far, then, as the system of bookkeeping is concerned, it is not open to criticism. The payment of these sums did not tend in any way to reduce or diminish the real earnings of the companies.

“There are no amounts due the United States because of mistaken or erroneous accounts.

“By the Act of 1864, all of the bond-aided companies were required to apply five per cent of their net earnings to the payment of the interest accrued on their debts to the United States. By the Act of May 7, 1878, this requirement was increased as to the Union and Central Pacific Companies to twenty-five per cent of the net earnings. In the opinion of the commission, these requirements have been fully satisfied.”

United States  
requirements  
fully satisfied.

Mr. Stevens, the Chief Accountant of the commission, after his examination of the company's accounts, concludes to the same effect, as follows: “The company have up to the present time complied with all the requirements of the laws prescribing payments to the United States; and all demands of the Government have been promptly met.”

As to the proceeds from lands, the commission find that “no lands granted to the companies have been diverted from their lawful use.”

Proceeds from  
lands.



Land patents.

In answer to the charge that the railroads had delayed in taking out patents for lands, the commission state: "It appears from the evidence that frequently the bonded companies did delay taking out their patents, with the object and for the purpose of avoiding the taxation to which they would be subjected after the perfection of their patents." In this statement, as in certain other cases, the commission group all of these companies together; and a complaint which is found against one is charged equally to all. It is in this way that many charges made against other of the roads are popularly thought to apply to the Central Pacific; and the commission has not altogether escaped the common confusion. The testimony furnished the commission on this subject by the Central Pacific shows that it has never been derelict in applying for patents, and that the failure of the United States land-office to furnish patents as fast as applied for has caused the company great loss in the sales of lands and in the business which would have arisen on their occupancy. The delinquency of the Government in making surveys and furnishing patents has increased from year to year, till, on June 30, 1887, this company had applications on file for 622,612.54 acres which the United States land-office had failed to act upon. The hopeless condition into which the United States general land-office has fallen in furnishing patents was shown by the official reports to be such that, "if no further lists of selections are presented to the department, and the average amount of business can be transacted in the railroad division in the future as in the past, it will require thirty-two years to complete the examination of the land already selected by lists of selections now before the department for examination" (testimony of President Stanford). The company has estimated its loss

Loss to company by delays of U. S. in issuing patents.

from the delays of the Government in issuing patents at \$500,000.

In the inquiry regarding loans by the company, and the names of the lenders and borrowers, reference was doubtless made to the irresponsible statement some time in circulation, that the directors were in the habit of borrowing from the company, to the injury of the latter. The report of the accountant of the commission shows that the company was nearly always a borrower from its principal directors. In speaking of the construction of the road, the commission make the following statement on this subject of loans :  
 " It is doubtless true that after July 7, 1864, and during  
 " the entire period ensuing, to the completion of the road,  
 " *these gentlemen* (Stanford, Huntington, Hopkins and  
 " Crocker) *used their personal credit* in order to assist in  
 " the consummation of the great enterprise. It is also  
 " true that the construction itself was conducted under  
 " circumstances of extraordinary difficulty. The engi-  
 " neering feat of successfully attacking and scaling the  
 " Sierra Nevada mountains is scarcely surpassed by any  
 " railroad construction in the world. The difficulties  
 " encountered by reason of the snow and violent winter  
 " storms, the vast excavations and fills required, the  
 " expensive sheds needed for the protection of the road, are  
 " vividly portrayed in the evidence of witnesses."

Loans made  
by company.

Regarding the investments in other companies and branch lines, it appears that these investments were made by means of consolidation and also by lease. The consolidated lines are not subject to the United States lien, but have greatly increased the earning power of the company, and as feeders have furnished much additional traffic to the aided line. The commission, following the popular cry,

Investments in  
branch lines.

comment on the leased lines in an injured tone, but without showing any injury. After considering the whole subject from this attitude of adverse criticism, they are compelled to the conclusion that, "the actual operation of the leases has, however, on the whole, been a source of profit to the Central Pacific Railroad Company."

Discriminations, etc.

As to the charges against this company of discriminations, pools and other devices, the commission conclude: "We are informed that the minority Commissioner has reported, as proved, an interminable succession of alleged discriminations, preferences and advantages granted for corrupt or improper purposes, and violations of duty of a similar character. We must respectfully protest against such conclusion, because it is based on no evidence worthy the name. It is a judgment rendered against the party inculpated without a sufficient hearing. Whenever the practice prevails, it has been found impossible for any railroad company in the country to maintain itself except by participation in the practice.

Pools.

"Pools are not in their essence either good or bad. When resorted to for the purpose of attempting a monopoly and the imposition of burdensome rates, they should be severely condemned. When resorted to for the purpose of preventing ruinous competition, they may serve a good purpose. Fierce competition begets the worst form of rebates and secret allowances. Its result is often the destruction of the weak carriers and the integration of their more powerful rivals, which, after destroying their weaker competitors, establish and maintain rates that are destructive to trade. Pooling agreements, with proper provisions for publicity as to the terms of the contract between the constituent members, and as to the rates to be charged, if subjected to suitable

“supervision and control, are beneficial both to railroads  
 “and to the communities which deal with them. Their  
 “existence in one form or another is almost universal in  
 “Europe. But the subject seems to have no bearing on  
 “the matter referred to the commission.”

The commission devote much space to complaints against the company for the issue of stock in part payment to the contractors for construction of the road, instead of requiring full payment in cash for all stock issued. They also complain that the company has paid dividends, though repeatedly stating that “no dividends have been unlawfully declared,” and seem to exceed somewhat their duties, as defined by the Act under which they were appointed, in gratuitously furnishing their *views on the policy* of paying dividends which were lawfully paid.

Capital stock  
and dividends.

In their strictures on the issue of capital stock and the payment of dividends, the commission again confuse the Central Pacific as to its legal obligations with the other Pacific railroads where distinction is most necessary to a correct understanding of the facts. They also ignore the fact that the capital stock is now largely held by third parties, who purchased practically upon the guaranty of the Government that all earnings in excess of the Thurman Act requirements would be available for dividends. Though their statements on this subject amount to a misrepresentation, yet we cannot believe that such was their intention. The conclusions of the commission rather resulted from their attitude towards the company, the impossibility of sufficiently digesting the immense mass of evidence before them in the time at their disposal, and, in the same limited time, to correctly trace the effects on each of the several companies of the various laws which have been passed concerning them. As the vital criticism of

Commission  
confuse the  
Central Pacific  
with other  
Pacific  
railroads.

this company made by the commission is on this point, and as the errors in their conclusions follow from their misapprehension as to the facts, it is proper here to correct the errors which they have published.

The commission state that: "By the second section of the Act of July 2, 1864, the Union Pacific Railroad Company was required to make assessments upon its stockholders of not less than five dollars per share, and at intervals not exceeding six months from and after the passage of the Act until the par value of all the shares subscribed should be fully paid. Money only was to be received for any such assessment, or as equivalent for any portion of the capital stock authorized. The commission report that this obligation has not been kept by any of the bond-aided railroad companies."

The commission seem ignorant of the fact that this section of the Act does not apply to the Central Pacific Railroad Company. This company was incorporated under the general railroad laws of California of 1861; and its duties regarding the issue of capital stock are as therein only provided. The provisions of these laws have been strictly followed by the company in its issue of stock. Indeed the issue of this stock, instead of being in violation of the laws under which the company was organized, was made necessary by them. This condition of affairs arises from the fact that the company, while organized and incorporated under the laws of the State of California, received also certain rights, and subjected itself to certain conditions under the laws of the United States. In accepting the terms of the Acts of Congress, it could not ignore the requirements of the State laws.

So far as the issue of stock or bonds of this company and the dividends paid out by it affect the lien of the United States in any way, the facts are as follows:

Central Pacific  
organized  
under laws of  
California and  
United States.

Limit of  
United States  
lien.



The commission show, by quoting the decision of the Supreme Court in *United States vs. The Kansas Pacific Ry. Co.* (99 U. S., 455), "that the lien of the United States is limited to that portion of the railroad in consideration of which the bonds were issued; that is to say, it applies only to the road between Ogden and San Jose, and has no application to any of the branches or leased lines."

The bonds issued by the United States to the Central and Western Pacific railroads amount to \$27,855,680. *This amount was provided for by the Act of July 1, 1862* (secs. 5 and 11). By section ten of the Act of July 1, 1864, the company was authorized to issue its first mortgage bonds for an *equal amount*, "and of even tenor and date, time of maturity, rate and character of interest." And the lien of the United States was made subordinate to such bonds of the company. By authority of this Act, the company issued its first mortgage bonds on the aided road to the amount of \$27,853,000. On December 1, 1862, the company issued \$1,483,000 in convertible bonds under the laws of California; and on July 1, 1864, it issued \$1,500,000 California State Aid bonds under authority of a special Act of the State legislature. These last two issues have since been redeemed from the operation of the sinking fund established for that purpose. They do not, therefore, affect the lien of the Government. The laws of California regarding the issue of bonds by railroads provide that they shall not exceed in all the amount of their capital stock (General R. R. Law of 1861, sec. 15). The testimony presented to the commission in San Francisco conclusively showed that this stock could not have been sold. No one was willing to purchase it, though every effort was made by the company to secure subscriptions. Had it depended on cash payments for

stock, therefore, the road would not have been built. To carry on the work, it was necessary for the company to issue the bonds authorized by the laws of the United States and of California. But to issue these, capital stock for an equal amount must be issued to comply with the State law. This was accomplished by issuing it in part payment for the work done. The stock at that time had little or no value. It could not be sold for any price.

Stock issued as  
required by  
law.

The issue of this stock, therefore, was not in violation of the United States law, which did not apply to this company; while it was required, under the laws of California, to enable the company to legally issue its bonds authorized by the Act of Congress.

The burden of the complaint of the commission is that the contractors for the construction of the road were directors of the company, and were practically its only stockholders at the time of such issue of stock in payment for construction. But, under such circumstances, they fail to show what difference it can make whether the stock is represented by 5,000 shares or 500,000 shares. The value of the property is not changed by the increase of its nominal capital. The earning power of the road is not affected; nor is the amount available for dividends more or less than before. The obligations as to the Government are the same in either case; and the lien of the United States is exactly as the Contract Acts provide. None of the stock could have any value until all prior obligations had been provided for. The surplus after such provision would belong to the stockholders of the company, whether the capital stock were more or less. Should the stock thus come to have a value, and should there be a surplus over all requirements available for dividends, it would properly belong to the holders of the stock,—those who organized the enterprise, who devoted their means, credit and lives

to the undertaking, and who carried it to a successful completion.

Dividends were first paid in 1873, and continued each year till 1877, when it was found that the United States requirements under the Contract Acts were not sufficient to meet the accruing obligations on the United States bonds, which were, however, payable only at their maturity. Dividends were then discontinued till the deficit was supposed to be finally provided for by the Thurman Act. *By section eight of this Act the company was excused from discharging, out of other funds than that provided by the Act, their debt to the United States. And by section six of the Act the company was allowed to pay dividends from any surplus there might be after providing for the requirements of the Act.* Accordingly, in 1880, dividends were resumed and continued till 1884.

Dividends paid legally and only as contemplated by Congress.

For the above periods, during which dividends were paid, the commission state: "Tested by the simple question of earnings, it is true that all of the above-named dividends appear by the income account of the company to have been earned. \* \* \* While finding that none of the dividends have been paid in violation of any statutory provision, we do not wish to be misunderstood as approving the policy of distributing the assets of these respective companies in this manner."

#### GOVERNMENT RESPONSIBLE FOR CONDITION OF DEBT.

The reason for not approving the policy of paying dividends legally earned is stated by the commission to be, that the payments to the United States required by the Acts of Congress are not sufficient to meet the accruing indebtedness; so that, at the maturity of the bonds, there

will be a large balance due for which no provision has been made. This state of affairs is not, however, chargeable to the company, but is the direct result of the management of the matter by the United States. The company offered to provide for this debt when it was in a position financially to do so. But the Government took the control from the company's hands. In assuming the control, it could not escape the responsibility; and its excusing the company from making other payments than it then forcibly prescribed, is evidence that the Government did not intend to shrink from the obligation it thus assumed.

Reasons for  
United States  
debt not being  
provided for.

It is important that the reasons why this debt has not been provided for should be stated, that the responsibility may rest where it belongs. The original Acts of 1862 and 1864 provided that the debt and interest should be paid within thirty years from the dates of the bonds; and until the debt should be paid the company should annually pay thereon five per cent of the net earnings of the aided road and one-half the charges for transportation of United States mails, troops, munitions of war, etc. It was shown by official reports, during the debates on the bill, that the Government was paying over \$7,000,000 a year for transportation on the plains; and it was believed that these requirements would finally provide for the debt.

The road was completed in 1869, in seven years less time than was allowed by the contract. In 1877 it became fully apparent, on account of reduced rates charged for United States mails, troops, etc., and the ending of the Indian wars, by which the Government saved many times the amount of the debt, that the annual requirements provided by the contract would not be sufficient to meet the debt at its maturity. The subject then received the attention of the company and of the Government. The

matter was at different times before both houses of Congress and it became more and more evident that harmonious action could not be had between the United States and the company.

*Thereupon the company, on January 30, 1878, approved a plan, and ratified it by the formal adoption and publication of proper resolutions, which would positively provide for the payment of the debt and interest at maturity.* This plan contemplated a sinking fund in the treasury of the company, into which semi-annual payments were to be made, which, with their income from investments, would be sufficient "to overtake and cancel said remainder of "indebtedness by the date of maturity, if invested in a "sinking fund with an interest accumulation of four per "centum semi-annually; \* \* \* and that if, by reason "of a lower rate of interest prevailing on first-class invest- "ments within this State, or if, from any other cause, it "shall appear to the Finance Committee that said sinking "fund is unable to earn and accumulate at the aforesaid rate "of eight per cent per annum, then and in that case they "shall cause a proportionately larger sum to be applied "semi-annually to said fund, so as to make up any defi- "ciency. And all said sums shall be appropriated from "the common treasury of the company, out of any moneys "remaining after the payment of operating and adminis- "trative expenses, the interest upon its debt, and the "installments to the several sinking funds provided "therefor, and before any moneys shall be paid out as "dividends upon the capital stock" (extract from published resolutions).

Company's  
offer to provide  
for debt.

*This plan was proposed by the company at a time when it could have been carried out.* It was the most successful period in its history. Had the Government allowed the matter to remain in the management of the company, it



would have pledged by this plan not only the earnings of the aided line, but its entire net profits before the payment of any dividends, whether earned on aided, non-aided or leased lines.

The company was, however, relieved from making this final provision for the debt. The Government assumed the control and responsibility of the matter by the adoption of the Thurman Act; *section eight of which excuses the Central Pacific Railroad Company from the duty of discharging, out of other funds than that provided by the Act, its debt to the United States.*

The company thereupon, on August 21, 1878, rescinded the resolutions which had provided for the establishment of a sinking fund in its own treasury.

Dividends  
practically  
promised by  
Congress.

After the Thurman Act had gone into effect, payments thereunder were fully made; and a sufficient surplus remained available for dividends, which were then resumed, and regularly paid until 1884. The commission show, as above stated, that all the requirements of the company under the Thurman Act have been fully and promptly complied with, and that no dividends have been declared except from the surplus profits of the company, and after the annual payments under the Act had been made. It was not only contemplated by this Act that any such surplus as there might be should be used in the payment of dividends; but handsome dividends were predicted by both the Senate and House Committees in their reports on the bill.

By section six of the Thurman Act, the payment of dividends is specifically allowed after the payments under the Act are provided for.

The House Committee, in their report to Congress on the subject of a sinking fund, states that the companies "are making large profits, and are abundantly able to indem-

“nify the Government against future loss, and pay hand-  
 “some dividends besides on the par value of the stock.  
 “\* \* \* With the Central Pacific Company, the net  
 “earnings are NEARLY FIFTEEN PER CENT ON THE NOMI-  
 “NAL CAPITAL STOCK” (44th Cong., 1st Session, Rep.  
 No. 440, p. 14).

The Judiciary Committee of the Senate, in submitting the Thurman Bill, stated that this company would be able to make payments under the Bill of \$1,900,000 per annum, “*and have a surplus sufficient for handsome divi-*  
 “*dends to its shareholders.*” They continue, “that after  
 “paying the requirements of the Acts of 1862 and 1864  
 “and all other charges, the annual amount that will be  
 “divided among the shareholders, should no sinking fund  
 “be created, will be nine per cent on the nominal value  
 “of the stock,—\$4,883,795. If the bill we report become  
 “a law, this amount would be diminished by the amount  
 “required to be paid into the sinking fund, say \$1,400,000,  
 “leaving \$3,483,795 after the payment of all expenses  
 “and interest, and the payments into the sinking fund,  
 “to be divided among the shareholders, being 6.4 per cent  
 “on the nominal value of their stock” (45th Cong.,  
 2d Ses., Rep. 111, p. 9).

The Supreme Court also, in the sinking-fund cases, dwells upon the protection to the stockholders by the Thurman Act, and implies the promise that, after the terms of the sinking-fund Act are complied with, no further obstacle will be in the way of continued dividends so far as the debt to the Government is concerned. In the case of *U. P. R. R. vs. U. S.*, the Court in October, 1878, said :  
 “The company has been in the receipt of large earnings  
 “since the completion of its road ; and, after paying the  
 “interest on its own bonds at maturity, has been dividing

“ the remainder, or a considerable portion of it, from time  
 “ to time, among its shareholders, without laying by any-  
 “ thing to meet the enormous debt which, considering the  
 “ amount, is soon to become due. It is easy to see that in  
 “ this way the stockholders of the present time are receiv-  
 “ ing, in the shape of dividends, that which those of the  
 “ future may be compelled to lose. It is hardly to be pre-  
 “ sumed that this great weight of pecuniary obligation can  
 “ be removed without *interfering with dividends hereafter,*  
 “ *unless at once some preparation is made by sinking fund*  
 “ *or otherwise to prevent it.*”

The needed sinking fund which would provide for the  
 debt and so not interfere with dividends thereafter was  
 established by the Act which the court was at the time  
 considering. The Act was not alone for the benefit of the  
 Government. It was for the benefit of the corporation  
 itself, and for the holders of its *stock* and bonds. “The  
 Act,” the court continues, “establishes a sinking fund for  
 “ the payment of its debts when they mature, but does not  
 “ pay the debts. \* \* This is no more for the benefit of  
 “ the creditors than it is for the corporation itself. It tends  
 “ to give permanency to the value of the *stock* and bonds,  
 “ and is in the direct interest of a faithful administration  
 “ of affairs. It simply compels the managers for the time  
 “ being to do what they ought to do voluntarily. The  
 “ fund to be created is not so much for the security of the  
 “ creditors as the ultimate protection of the public and  
 “ the *corporators*. \* \* \* It takes nothing from the  
 “ corporation or the stockholders which actually belongs  
 “ to them. It oppresses no one and inflicts no wrong. It  
 “ simply gives *further assurance of the continued solvency*  
 “ *and prosperity* of a corporation in which the public are  
 “ so largely interested, and adds another guaranty to the  
 “ permanent and lasting value of its vast amount of securi-

“ ties. \* \* \* The right of the stockholders to a  
 “ division of the earnings of a corporation is a privilege  
 “ derived from the charter. When the charter and the  
 “ amendments first became laws, and the work on the  
 “ road was undertaken, it was by no means sure that the  
 “ enterprise would prove a financial success. No statu-  
 “ tory restraint was then put upon the power of declaring  
 “ dividends. It was not certain that the stock would  
 “ ever find a place on the list of marketable securities, or  
 “ that there would be any bonds subsequent in lien to  
 “ that of the United States which could need legislative  
 “ or other protection.”

That the sinking fund in the United States Treasury has not amounted to as much as Congress predicted is a misfortune to the company. Had the net earnings and the United States transportation charges been as great as predicted, the debt would have by that means been provided for. That they have not been as much is, however, no fault of the company, and does not change the terms of the annual requirements. The responsibility for the operation of the sinking fund was assumed by the Government upon taking the matter out of the company's hands. The excuse of the company from making other provisions for the debt stands, whether the fund has realized its expectations or not. After paying the amounts required by the Act, the surplus, if any, is still available for dividends to stockholders according to the promises contained in the Act, and in the decisions of the Supreme Court. And the predictions made by the Congressional Committees justified the stockholders in believing that such surplus would continue to allow large dividends.

The protection given stockholders by this Act, together with the reports of the committees, the decisions of the courts in connection with it, and the implied promises

The failure of  
the Thurman  
Act no fault of  
the company.

Stock pur-  
chased by  
many small  
holders under  
the protection  
offered by  
Congress.

of continued dividends thus made by the Government, created a public confidence in the value of the stock, and led many with small means to purchase it as a permanent investment. It had, in their opinion, practically the guaranty of the Government. The cloud of the United States lien had been removed by the Government's promise that it would be provided for by the payments into the sinking fund. As soon as it was demonstrated that these payments could be made and still leave a surplus available for dividends, the stock found ready purchasers; and it has since that time been divided into small holdings. The commission state that: "But little stock " was sold by Stanford, Huntington, Hopkins and Crocker " until 1880. Between 1873 and 1877, they were sub- " stantially the only stockholders of the Central Pacific " Railroad."

The present large number of small holders have purchased under the implied promises of the Government for the final settlement of the debt by the operation of this Act. The predictions of large dividends have failed. For this there is now no remedy. But the assurances that no more would be required from the income than twenty-five per cent of the net earnings of the aided line have the same force as when they were made. That the net earnings have not been as much as predicted is to a large extent owing to the competition of parallel lines, which were also aided in their construction by the United States; and the fact that the sinking-fund has not increased by compound interest, as was expected, is owing to its management by the Government.

Contract Acts  
amended by  
Thurman Act.

The Thurman Sinking Fund Act was an amendment to the Contract Acts of 1862 and 1864 (see sec. 13). The original Acts required the payment of one-half charges on United States transportation, and *at least five per cent* of



the net earnings. The amended Act requires the payment of the whole of the charges on United States transportation, five per cent of the net earnings, and such an additional sum as shall make in all *twenty-five per cent* of the net earnings. *It excuses the company from making other payments than these*, and after such payments are made allows any surplus there may be for the payment of dividends.

The essence of this change in the agreement is not the amount that is to be paid, but that it shall be all the charges on United States transportation, and in addition thereto a sum sufficient to make twenty-five per cent of the net earnings. In the event of a foreign war, the transportation of troops might in a year amount to enough to cancel the debt, as the charges would all be withheld by the United States. That they have not been so great as anticipated is a cause of congratulation on the part of the Government; for it would have lost many times more by the necessity for the transportation than it would profit by the full payment of the bonds and interest.

The popular charges made against this company which are echoed in the Act of Investigation are thus found to be without foundation. This conclusion the commission were compelled to report regarding all of the allegations excepting those relating to land patents and the issue of capital stock; and their exceptions in these cases arose from confusing the laws affecting the several Pacific railroads, and erroneously judging this company by certain obligations and acts chargeable only to others.

Conclusion as  
to charges  
against  
company.

These facts fully establish this company's claim that it has kept and performed in good faith every obligation towards the United States; that in its dealings with the Government it has never neglected any duty; and that

lack of sufficient provision for the debt is from no fault of the company, but from the acts of the government.

#### EQUITIES CLAIMED BY THE COMPANY.

In contrast to these conclusions as to the popular charges, are the claims in favor of the company, consisting of certain equities suggested by the Act of Investigation. These are briefly as follows :

Completion of  
road seven  
years before  
time allowed.

The road was opened for through traffic May 10, 1869. The law allowed the company until July 1, 1876. The Government and the public thus received the benefit of its use seven years earlier than was required of the company by the contract. The commission state that: "This early  
" completion of the road was doubtless of great benefit to  
" the United States. The advantage of reduced rates  
" for transportation of troops, supplies, munitions of war  
" and the mails was thereby secured and enjoyed six  
" (seven) years sooner than would have been the case if  
" the bond-aided companies had taken the full measure of  
" time permitted by law."

On account of this early completion, the cost of construction was greatly increased. At the time the road was constructed, the prices of labor and materials in California, Nevada and Utah were enormously inflated, not only on account of the war prices which then prevailed, and the war risks which were incurred in transporting material from the East by sea, but also by the great mining excitement which prevailed in California and Nevada, and employed nearly all the available labor. It is shown by the testimony of engineers who had charge of the construction of the road that the cost exceeded fifty per cent more than it would have been if the completion had been delayed until 1876.

During the time of construction, all payments made on the Pacific Coast were in United States gold. The bonds of the United States issued to the company were made *payable in currency*. Gold during all the period of construction was at a high premium. The company has shown that, in order to get the gold coin necessary to pay its bills, it was compelled to sell the bonds at a discount of \$7,120,073.55. The company is charged interest by the United States on the par value of these bonds at six per cent for thirty years, which on the discount lost makes the sum of \$12,816,132.39. The total charge, therefore, to the company, for which it received really no equivalent, is \$19,936,205.94.

Loss on  
United States  
currency  
bonds.

A further loss, which is a fair complaint by the company in connection with these bonds, is that the Government did not provide for their refunding at a lower rate of interest, as has been done with other United States bonds. The company has thus been charged unnecessarily with interest at six per cent for the thirty years, which could readily have been reduced to three per cent for half their term. This oversight of the Government increases the charge to the company over \$12,500,000.

As to the saving to the Government in the cost of transportation, the commission say: "The evidence, so far as the commission were able to obtain the same, establishes the fact that, before the completion of the Pacific railways, the cost of transportation was many times greater than it now is. Reference is made on this subject to the report of the War Department herewith submitted, and to the evidence of Kimball and Stanford, and the exhibits attached to Stanford's statement." A summary from these exhibits is given hereafter.

Saving in  
United States  
transportation

Although the company has at all times promptly paid the United States requirements under the several Acts of

Cash due com-  
pany unpaid.

Congress, the Government has neglected to pay the company for transportation services performed by it on non-aided and leased lines, even after the decision of the Supreme Court that such payments should be made to the company in cash (October term, 1885). This unjust and illegal withholding of moneys has been made for all the roads which were ever leased to or operated by the Central Pacific Railroad Company, and continues to the present time, when the roads are operated by the Southern Pacific Company. The amount thus retained by the Government which was due these companies in cash on December 31, 1888, and has not yet been paid, is \$2,584,052.56, of which \$1,068,161.67 is due the Central Pacific, and \$1,515,890.89 is due the Southern Pacific Company. Regarding these payments, the commission say: "In  
 "the judgment of the commission, after the determination by the Court of Claims and the Supreme Court of  
 "the United States in the case of the Denver Pacific R. R.  
 "against the United States (relating to the obligation of  
 "the United States to pay over these amounts), it was the  
 "duty of the Government to pay over, without delay, to  
 "the respective companies, all moneys due for services  
 "rendered by leased or auxiliary roads belonging to the  
 "bond-aided roads. \* \* \* Whatever amount there  
 "may be due to the Central Pacific R. R. Co., arising out  
 "of transportation, or services rendered by the branch  
 "lines, or by the unaided portion of the road, ought to be  
 "promptly paid to that company. It appears from the  
 "evidence, and the report of the Commissioner of Rail-  
 "roads, that the Central Pacific R. R. Co. has discharged  
 "all the obligations arising out of the Acts of 1862, 1864  
 "and 1878, respecting the transportation applicable to the  
 "interest and bond account, and applicable to the sinking-  
 "fund account, and also for the requirement calling for

“additional payments to the sinking fund until the  
 “amount of such payments should equal twenty-five per  
 “cent of the net earnings. The United States has there-  
 “fore no demand or claim on account of which it can  
 “justly retain any amount which is due from it to the  
 “Central Pacific R. R. Co.; and the amount so due ought  
 “to be paid and discharged without delay.”

The commission admit that much larger payments would have been made on the debt to the United States by the twenty-five per cent of the net earnings had not the Government subsidized opposition roads, and thus taken traffic from the Central-Union line, which it was contemplated that this line would have had, at least to the maturity of the debt. Transcontinental transportation for the United States in the same way has been diverted from aided to non-aided roads by the Government, thus reducing the payment on the debt to be made by these charges. They further state that, “The United States has granted very large amounts  
 “of aid in lands to other roads, which have become com-  
 “petitors of the Union Pacific Railway Co. and the Cen-  
 “tral Pacific R. R. Co.” The testimony presented to the commission shows that the traffic diverted to other lines, which were aided in their construction by the United States, has amounted to \$37,000,000, the Central Pacific proportion of which is about forty-six per cent, or say \$17,000,000.

United States  
 aid to compet-  
 ing lines.

The relations between the debtor company and the creditor Government concerning this diverted business are these: The contract contemplated that the debtor should discharge its loan by the annual payment of a percentage of the income from the mortgaged property. The creditor then proceeds to establish competing institutions, which greatly reduce the income of the property. This it does to advance its interests in other ways which are of much



greater importance than the collection of its debt in full. The percentages of income are promptly paid by the debtor; but they are less in amount than was contemplated, because of the act of the creditor. Any equitable settlement for the balance of the debt must, it is claimed by the debtor, consider these facts, payment in full now being impossible.

Embarrassment to company by legislation.

As to the embarrassment to the company by hostile legislation concerning which inquiry was asked by the Act, the commission report: "It is of the opinion that these roads " have been embarrassed by the frequency with which " bills intended to affect them have been introduced into " the legislatures of States and Territories through which " they pass. Many of these bills contained provisions " which, if adopted, would have been ruinous to the rail- " roads. Very frequently the persons introducing such " bills failed to realize the effect which their passage " would produce. The constant threat of the adoption " of such measures has been a source of embarrassment " to all the bond-aided companies, and has forced them to " protect themselves by frequent and constant attendance " before committees of the legislatures."

Losses to company by United States sinking fund.

The sinking fund in the Treasury of the United States, established by the Thurman Act, is invested, as provided by the Act, by the Secretary of the Treasury. The investments have been made in such a manner that there was in the fund, on December 31, 1888 :

In bonds . . . . .	\$3,021,000 00
In cash . . . . .	48,689 06
Total in fund . . . . .	<u>\$3,069,689 06</u>

The amount paid into the fund to the same time is \$3,469,641.62. The fund was established July 1, 1878.

As a result, therefore, of its operation under the Government management for the nine and a half years, there is \$399,952.56 less in the fund than has been paid in by the company.

The testimony to the commission showed that this company had been injured by the Government's management of the fund in premium paid and interest lost to July 1, 1887, by the sum of \$1,612,966.72. The loss to December 31, 1888, on this account, amounts to \$2,000,215.68. They report on this subject that : " It was the belief of Senator " Thurman, as appears from the debates in Congress, that " the sinking fund created under this Act would accumu- " late at the rate of five per cent per annum compounded, " and would, at the maturity of the debt, produce a sum " sufficient to liquidate the same. It evidently was the " opinion of the Supreme Court that the sinking-fund " would be managed by the Secretary of the Treasury so " as to give entire satisfaction, and do full justice to the " railway companies affected thereby. All these expecta- " tions have been disappointed. The fund does not " increase at five per cent per annum, or at three per cent " per annum. In fact it has lost money, and is worth " to-day less than the principal originally invested. \* \* " This in the opinion of the commission ought to be fully " remedied."

The commission examined into the operation of the lease of this company's lines to the Southern Pacific Company, and the criticisms which have been made in connection therewith, and conclude as follows: " In the judgment " of the commission, the terms of the lease are just and " equitable as between the companies; and its operation " has as yet given no just cause of complaint."

Lease to  
Southern  
Pacific Com-  
pany.

Conclusion as to failure of United States in its duty towards this company.

The commission thus find that the Government, in its acts towards this company, has violated the letter of its obligations in several particulars, and the spirit of the contract in many others. And all of the allegations, which practically were contained in the Act of Investigation, to the effect that the Government has failed in its duty towards the company, are shown to be true.

In view of these facts, the company has claimed that any equitable settlement with the United States for the balance remaining due on the debt must consider this failure of good faith on the part of the Government, and the injuries thus done the company. The wording of the Act of Investigation clearly suggests that these failures of the Government in its duty, if found to be true, should be considered as equities on the side of the company.

#### BILL PROPOSED BY COMMISSION—NO SETTLEMENT.

The salient feature of the bill proposed by the commission is to find the present value of the debt, and for this amount to issue to the United States, bonds of the company to run fifty years, to bear three per cent interest, and to be retired by the annual application of a sinking fund. The whole to be secured by a mortgage on all the company's property, including the aided and non-aided lines. The payments required from the company under this bill as estimated by the commission are, for the first ten years, \$1,726,000 per annum; for the remainder of the time, \$1,973,000 per annum.

*This bill cannot be considered as a real effort towards the settlement of the debt, as it requires payments which the commission themselves state would be beyond the power of the company to make. Its acceptance by the company, if it were adopted by Congress, would but end in failure and*

the renewed discussion of the whole matter, with the addition of further complications. In recognition of this, the commission state that: "It is hardly to be expected  
" that any Act resembling the Act submitted in the case  
" of the U. P. Ry. will be accepted by the Central Pacific  
" R. R. Co." They suggest, therefore, that: "If the  
" Central Pacific R. R. Co. should reject the terms pro-  
" posed because of its inability to comply with them, and  
" it should be deemed advisable to effect a permanent set-  
" tlement with that company, a method by which that  
" result might be obtained would be a reduction of the  
" interest to a rate lower than three per cent. The pro-  
" priety of such an action might, in the judgment of the  
" commission, be justly referred to a board to be desig-  
" nated by Congress, or to Congress itself."

## II.

## THE BENEFITS PROMISED TO THE GOVERNMENT AND THE COMPANY, AND HOW THEY HAVE BEEN REALIZED.

The obligations imposed by the Acts can only be fairly interpreted by a consideration of the benefits which were to accrue to both the United States and the company by the construction of the road. These promised benefits for the Government and the public were the cause of the grant of aid; and the benefits predicted for the company in the way of earnings and charges on transportation for the United States were the promises on which the terms of the loan as to the manner and time of its repayment were based. A review of these promised benefits on either side will therefore assist to a fuller understanding of the relations between the Government and the company resulting from the loan, and the obligations in connection therewith.

## CAUSES OF THE UNITED STATES AID.

The causes which led the Government to aid the construction of the road are ably expressed by Mr. Justice Davis of the Supreme Court in delivering the opinion of the Court in *United States vs. Union Pacific Railroad* (91 U. S. Rep., 79), as follows: "Many of the provisions in "the original Act of 1862 are outside of the usual course "of legislative action concerning grants to railroads, and "cannot be properly construed without reference to the "circumstances which existed when it was passed. The "War of the Rebellion was in progress; and, owing to "complications with England, the country had become "alarmed for the safety of our Pacific possessions.



"The enterprise was viewed as a National undertaking  
 "for a National purpose; and the public mind was directed  
 "to the end in view rather than to the particular means  
 "for securing it. Although the road was a military neces-  
 "sity, there were other reasons active at the time in pro-  
 "ducing an opinion for its completion besides protection  
 "of an exposed frontier. There was a vast unpeopled  
 "territory lying between the Missouri and Sacramento  
 "Rivers which was practically worthless without the facil-  
 "ities afforded by a railroad for the transportation of per-  
 "sons and property. With its construction, the agricultu-  
 "ral and mineral resources of this territory could be  
 "developed, settlements made where settlements were  
 "possible, and thereby the wealth and power of the  
 "United States largely increased; and there was also a  
 "pressing want, in time of peace even, of an improved  
 "and cheaper method for the transportation of the mails,  
 "and of supplies for the army and the Indians.

Supreme  
 Court as to  
 cause of aid.

"It was in presence of these facts that Congress under-  
 "took to deal with the subject of this railroad. The  
 "difficulties in the way of building it were great, and  
 "by many intelligent persons considered insurmountable.

"The scheme for building a railroad two thousand  
 "miles in length, across mountains, over deserts, and  
 "through a country inhabited by Indians jealous of intru-  
 "sion upon their rights, was universally regarded at the  
 "time as a bold and hazardous undertaking. It is nothing  
 "to the purpose that the apprehended difficulties in a great  
 "measure disappeared after trial, and that the road was  
 "constructed at less cost of time and money than had  
 "been considered possible. No argument can be drawn  
 "from the wisdom that comes after the fact.

"The project of building this road was not conceived  
 "for private ends; and the prevalent opinion was that it

“could not be worked out by private capital alone. It was a National work, originating in National necessities, and requiring National assistance. The primary object of the Government was to advance its own interests; and it endeavored to engage individual co-operation as a means to an end,—the securing a road which could be used for its own purposes.”

On the same subject, the United States Commissioner of Railroads (Rep. 1883, p. 13) concludes that: “The purposes of Congress in granting the liberal aid extended to these companies were held to be important elements in arriving at the true construction of their present relations to the Government. All these purposes have been much more than realized; and it has been frequently and officially stated that the actual saving, year by year, to the Government greatly exceeds the whole annual interest paid.”

Specification  
of causes for  
grant.

The chief causes which led to the grant of aid may be summarized as follows: (1) That it was a political necessity, and would prevent the loss to the Union of the Pacific States; (2) That it was a military necessity, and would enable the Government, by the rapid movement of troops, to resist the invasion of a foreign enemy; (3) That it would end the Indian wars; (4) That it would furnish a cheaper and more rapid means of transportation for mails, troops and munitions of war; and (5) That it would lead to the development of the resources of the vast and then unpeopled territory between the Missouri and Sacramento Rivers.

On the other hand, there were certain predictions made of benefits that were to be received by the company from the operation of the road. The most important of these were: (1) That one-half the charges for transportation

services performed for the United States would amount to as great a sum as the accruing interest on the subsidy bonds ; (2) That the commerce between Asia and Europe would be carried across the American continent ; and (3) That the net earnings of the line from the above and other sources would be so great that five per cent of the amount applied on the principal of the bonds would be sufficient to pay them on or before their maturity.

We may now review these several considerations in light of the results.

#### A POLITICAL NECESSITY.

At the time the Pacific Railroad Acts were passed, it was still a question whether States would be allowed to withdraw from the Union. The probability of the withdrawal of the Pacific States at any time or for any reason was not then looked upon as an impossibility. It was in fact by many thought to be very probable. The West was separated from the East by the Rocky Mountains,—a natural barrier such as in all other parts of the world has divided the nations from one another, and which with us is geographically known as the great continental “divide.” With the peoples living on either side of so vast a continent separated by a natural boundary, local interests frequently urge the adoption of different policies. As this is a government of the majority, the only remedy for the Pacific Coast minority in case of a contest would be in secession. The population of the coast at that time consisted chiefly of Mexicans, and immigrants from the Eastern States who had reached there by way of the Isthmus of Panama, or more commonly by the long overland route of toil and hardship. With the means of communication available, few of these would ever revisit the scenes

of their youth ; and their children would look upon the Eastern States as a foreign land. Without the means of rapid and easy communication, the feeling of relationship would gradually die away ; and differences of sentiment and of interest would increase and expand in time with the growth of population and the development of the country.

The secret of the harmonious control under a Republican form of government of so vast and varied a population, extending over so great an area as the United States, is found in railroad transportation. Without that easy communication and intercourse which the railroad alone affords, the tendency of the different parts would be from one another, instead of following the present course towards homogeneity of ideas and harmony of interests. Whether the fears regarding the continued allegiance of the Pacific States would or would not have been realized had no Pacific railroad been built, they were by its construction completely dispelled. So far, then, as the political cause of the aid is concerned, it must be admitted that the end desired has been realized.

#### A MILITARY NECESSITY.

The importance of railroad transportation to the Pacific as a means of concentrating troops for defense from invasion by foreign force, or to quell domestic disturbances, had long been urged before Congress. In 1862, the strained condition of our foreign relations caused it to be considered a necessity. We had been on what, at that time, appeared to be the eve of a war with England. Her demands in the Trent affair had been acceded to from a sense of helplessness, not of right. It was stated that orders had gone out to the British fleet in the Pacific to strike at San Francisco as soon as news arrived of the commencement of hostilities. The Pacific Coast would

be comparatively defenseless in the event of such a war. The British fleet there numbered two ships to our one, four steam vessels to our one, and three guns to our one. Had such a war taken place, there is every probability that the British possessions on the Pacific Coast to-day would extend from the Arctic Circle to the Gulf of California.

The apprehensions of the past, well grounded as they were, are now forgotten. Yet the defense of the Pacific States to-day in the event of a foreign war would be the railroads. Within a week's notice the resources of the continent could be massed at San Francisco. Without the defense furnished by rapid transportation, it would be necessary to maintain a navy equal to the most formidable afloat, and to spend many millions annually in the fortification of our harbors. The present availability of all the resources of the country at any point of attack or need by the means of railroad transportation is thus commented on in the report of the General of the Army:

“Our population is now sufficiently great to admit of  
 “the formation of armies of any size that may be desired.  
 “Our railway mileage is in the neighborhood of 115,000  
 “miles (1883), penetrating every part of our vast domain,  
 “and especially those regions from which supplies would be  
 “drawn. It is not probable that a foreign foe will ever  
 “undertake an invasion of our country. But, should  
 “such an event occur, we would not be called upon to  
 “organize forces at all comparable in number with those  
 “used during the civil war; and the ease with which  
 “they could be supplied goes without saying. With our  
 “great extent of vulnerable coast, it would be a simple  
 “matter for an enemy to land an invading force; but,  
 “before it could be prepared to move inland, it would be  
 “opposed by an army amply sufficient to destroy it,  
 “drawn from every direction and concentrated by means

Views of  
 General of  
 the Army.



“ of the railways. With harmony existing among our people, as at present, a successful invasion of our territory may well be considered impracticable ” (Report Secy. of War, 1883, Vol. I, p. 299).

#### TO END THE INDIAN WARS.

A third reason for the aid was the belief that the construction of the road would end the Indian wars. The old system of fighting the Indians was stated to be as fruitless as it was extravagant. The savages were mounted. They were the best horsemen in the world. They attacked almost unseen, and were out of sight and beyond pursuit in a moment. They had no permanent homes and no fixed property, no crops to watch, no stores to guard, no invasions to fear. During the season of grass, to war on them was to pursue shadows in a circle. December left the vast field of strife exactly as April found it, save that the graves of white soldiers roughened the surface; while few had seen a mound that marked the grave of a dead Indian. It was said that the Indians would be awed and subdued by the road and its influences; that as fast as the line advanced they would recede before it; and a row of white settlements would spring up along its path.

An idea of the extent to which these predictions have been fulfilled may be gained by a statement upon the subject made by General Sherman. He is perhaps the person best fitted to estimate the importance as a military measure of the Pacific railroads. Between 1849 and the year of his retirement, he tells us, he had crossed the continent by every known route; and experience continually forced upon his mind the necessity of railroads as a final solution of the Indian question. In his last report as General of the Army, he says (Report, 1883, p. 5): “ I now regard the Indians as substantially eliminated “ from the problem of the army. There may be spas-

General  
Sherman on  
ending Indian  
wars.

“modic and temporary alarms; but such wars as have  
 “heretofore disturbed the public peace and tranquil-  
 “lity are not probable. The army has been a large  
 “factor in producing this result; but it has not been the  
 “only one. Immigration and the occupation by indus-  
 “trious farmers and miners of lands vacated by the  
 “aborigines have been largely instrumental to that end;  
 “but the *railroad* [the italics are the General’s], which  
 “used to follow in the rear, now goes forward with the  
 “picket line in the great battle of civilization with bar-  
 “barism, and has become the *greater* cause. I have in  
 “former reports for the past fifteen years treated of this  
 “matter; and now, on the eve of withdrawing from active  
 “participation in public affairs, I beg to emphasize much  
 “which I have spoken and written heretofore. The recent  
 “completion of the last of the four great transcontinental  
 “lines of railway has settled forever the Indian question,  
 “the army question and many others which have hitherto  
 “troubled the country. \* \* \* I regard the building  
 “of these railways as the most important event of modern  
 “times, and believe that they account fully for the peace  
 “and good order which now prevails throughout our  
 “country, and for the extraordinary prosperity which  
 “now prevails in this land. A vast domain, equal to  
 “two-thirds of the whole surface of the United States,  
 “has thus been made accessible to the immigrant; and,  
 “in a military sense, our troops may be assembled at  
 “strategic points and sent promptly to the places of dis-  
 “turbance, checking disorders in the bud.”

#### SAVING IN UNITED STATES TRANSPORTATION CHARGES.

The saving in transportation charges was one of the  
 greatest direct benefits which the Government expected

from the building of the Pacific railway. That the predicted benefits in this respect have been more than realized has repeatedly been shown by officers of nearly every department of the Government. The reports of the Secretary of War, the Secretary of the Navy, the Secretary of the Interior, the Secretary of the Treasury and the Postmaster-General, all bear testimony to the same effect. The charge to the United States for transportation of troops and army supplies on the route now covered by the Central-Union Pacific line prior to the construction of the road has been usually stated as about ten times the annual charge since then. On April 8, 1862, the chairman of the House Committee on Pacific railroads (Mr. Campbell), in committee of the whole, stated: "On the ground of economy, which we all admit to be of the first moment in the present condition of public affairs, the construction of a Pacific railroad will save the Government annually a large sum, which truth I now propose to demonstrate" (see *Cong. Globe*). He then presented official communications, showing the annual expenditure in time of peace, under ordinary circumstances, for Government transportation to the Pacific Coast, to be \$7,357,781. And he continues: "Take then the annual interest (estimated at \$3,892,080 for Central-Union line, though actual interest proved to be but \$3,305,531) from the annual expenditure, and we have left a sinking fund of \$3,465,701, a sum more than sufficient to extinguish the bonds before they become due, or, what is the same thing in effect, saved to the Government by cheapening expenditure in that direction."

Quartermaster-General Meigs shows that the cost to the Government for the transportation of military stores westward across the plains, for the fiscal year ending June 30,

Transportation charges paid prior to road.

1865, was \$6,388,856. "This expenditure," the Quartermaster-General states, "would be reduced, by the "opening of the railroads, by a sum which would aid "materially in paying interest upon the cost of their construction" (Rep. Secy. of War, 1865-66, Vol. I, p. 114).

A further idea for the former cost to the Government is given in the report of the Pacific Railway Committee of the Senate dated February 19, 1869, in which it is stated that the Indian wars for the thirty-seven years then past cost the Nation 20,000 lives and \$750,000,000, or about \$20,000,000 annually. During the years 1864 and 1865, the Quartermaster's department alone spent \$28,374,228 for military supplies against the Indians (40th Cong., 3d Session, Sen. Rep. Com., 219, p. 16).

Cost of Indian wars.

Compared with these former expenditures, it is interesting to note the present charges to the Government on the Central-Union line for transportation of troops, passengers, military supplies and other freight, which for the past ten years is given below:

Present cost of army transportation.

YEARS.	Central Pacific.	Union Pacific.	Total Line.
1878 . . . . .	\$192,951	\$518,279	\$711,230
1879 . . . . .	253,141	552,912	806,053
1880 . . . . .	294,782	598,782	893,564
1881 . . . . .	513,592	576,209	1,089,801
1882 . . . . .	95,917	447,014	542,931
1883 . . . . .	82,957	448,029	530,986
1884 . . . . .	173,939	300,594	474,533
1885 . . . . .	44,059	225,142	269,201
1886 . . . . .	38,362	217,806	256,168
1887 . . . . .	28,531	141,072	169,603
Total for ten years .	\$1,718,231	\$4,025,839	\$5,744,070

Wagon  
freight rates.

Transportation for the army was the chief item of expense formerly incurred in conducting campaigns against the Indians. This service was performed with wagon trains by contract. The rates ranged from \$3.00 to \$1.60 per hundred pounds per hundred miles (see Rep. Secy. of War, 1867-68, Vol. I, p. 533; 1868-69, part I, p. 829). The lowest of these rates equals thirty-two cents per ton per mile. The average rates per ton per mile charged by the Central Pacific and its associated lines for the past ten years were as follows :

Railroad  
freight rates.

Central Pacific.	Rate per ton per mile, cents.
1878 . . . . .	2.75
1879 . . . . .	2.43
1880 . . . . .	2.34
1881 . . . . .	2.16
1882 . . . . .	1.81
1883 . . . . .	1.92
1884 . . . . .	1.96
1885 . . . . .	1.83
1886 . . . . .	1.38
1887 . . . . .	1.49

It will thus be seen that, as to both the amounts and rates, the charges for army transportation have been reduced to a fraction of what they were before the completion of the road. A similar conclusion has been reached from an investigation on the subject made by order of the General of the Army, which is stated as follows: "Taking the route from Fort Leavenworth to Fort Union for example, the average cost by wagon per hundred pounds per hundred miles, for the sixteen years from 1855 to 1870, both inclusive, was \$1.77 (or 35.4 cents per ton per mile); whilst by rail it is now less than one-tenth of that amount. This represents the relative cost of wagon and railway transportation, bearing in mind that any variation is always such as to show more strongly



“ the advantages of railway transportation. In some cases  
 “ transportation by wagon is twenty times more costly than  
 “ by railway ” (Rep. General of the Army, 1883, p. 213).

From the foregoing facts, it is apparent that the reduction in charges to the United States for the transportation of military supplies and stores is owing to the reduction in rates, which have fallen from thirty-two cents per ton per mile as the lowest ante-railroad rate, to the average of 1.49 cents in 1887.

Reduction in rates.

The charges for mail transportation, and the data relative to the weights and character of the service, are all furnished by the annual reports of the Postmaster-General. The rates paid just prior to the completion of the railroad between the termini of the Pacific railroads from Cheyenne, Wyoming, to Virginia City, Nevada, for carrying an average daily weight of mails of from 1,000 to 1,500 pounds, was \$1,598.17 per mile per annum (Rep. P. M. Gen., 1868, p. 7; 1869, p. 9). The rates since the completion of the railroad have ranged from about \$250 to \$500 per mile per annum. But this was for carrying an average daily weight of from 5,300 to 30,000 pounds. The mails by rail are carried in postal cars built according to the Government's plans, affording every facility for the distribution of mails *en route*, and so expediting their prompt and proper delivery. In the certainty, celerity and security of the service, there can be no comparison between the old conditions of affairs and the new. Their relations present a contrast as remarkable as that of the mail service between the Colonies before the war of the Revolution, compared with that between the States after the war of the Rebellion.

Charges for U. S. mails.

An exhibit of the amounts saved to the United States in the transportation of troops, military supplies and mails,

furnished from official sources, appears in the report of the United States Pacific Railway Commission (p. 2583 *et seq.*). A summary of this exhibit is as follows:

1869-1876.

Summary of  
saving.

*Exhibit of saving to the United States in transportation charges by the construction of the Central-Union Pacific Railroad line, from the completion of the road to July 1, 1876.*

TRAFFIC.	U. S. Transportation Charges on Central-Union Pacific.	Cost to U. S. at rates paid prior to Railroad.	Saving to U. S. to June 30, 1876.
Freight . . . . .	\$1,793,556 00	\$15,509,977 00	\$13,716,421 00
Troops, etc . . . . .	2,162,296 00	18,698,671 00	16,536,375 00
Mails . . . . .	3,689,343 00	21,199,725 00	17,510,382 00
Total . . . . .	\$7,645,195 00	\$55,408,373 00	\$47,763,178 00

1869-1885.

*Exhibit of saving to the United States in transportation charges by the construction of the Central-Union Pacific Railroad line, from the completion of the road to January 1, 1886.*

TRAFFIC.	U. S. Transportation Charges on Central-Union Pacific.	Cost to U. S. at rates paid prior to Railroad.	Saving to United States.
Freight . . . . .	\$5,740,753 00	\$61,161,307 00	\$55,420,554 00
Troops, etc . . . . .	4,616,053 00	49,178,967 00	44,562,914 00
Mails . . . . .	10,606,507 22	49,970,780 47	39,364,273 25
Total . . . . .	\$20,963,313 22	\$160,311,054 47	\$139,347,741 25

The United States bonds and accrued interest thereon issued on the same line, to the same date, less the amounts repaid by the companies, was shown to be . . . . . \$ 86,685,907 86

Saving more than bonds and interest.

The saving to the United States in transportation charges to January 1, 1886, was . . . . . 139,347,741 25

Thus exceeding the debt and interest by the amount of . . . . . \$ 52,661,833 39

Supposing an equal average annual saving were to continue to the maturity of the debt, the result would be as follows:

*Exhibit of saving to the United States in transportation charges by the Central-Union Pacific line, to the maturity of the United States bonds.*

Estimate of saving to maturity of bonds.

KIND OF SERVICE.	Average Yearly Amount saved by Government.	Amount saved in Thirty Years to Maturity Debt.
Freight . . . . .	\$3,463,785 00	\$103,913,550 00
Troops, etc. . . . .	2,785,182 00	83,555,460 00
Mails . . . . .	2,385,714 00	71,571,420 00
Total . . . . .	\$8,634,681 00	\$259,040,430 00

It appears then that in the first seven years during which the road was in operation before it was expected or required to be completed by the Contract Acts, the Government saved, in transportation charges, \$47,763,178, an amount during this short time greater than the sum realized by the companies for the bonds issued to them by the United States. The saving to the end of 1885, or for about

half the time the bonds were to run, amounted to \$139,347,741, exceeding by over \$52,000,000 the whole amount of bonds and interest to the same date, less the amounts which had been repaid by the companies. Had the loan therefore been a donation, it would still be more than justified by the results.

#### DEVELOPMENT OF THE WEST.

A further cause for the issue of United States bonds was to develop the resources of the continent west of the Missouri River. Here is a territory comprising in area almost two-thirds of the whole United States, the greater part of which could never have had a market if it were not for railroad transportation, and so would practically be unavailable for settlement. A glance at the map will show how all-important the railroad here is. The States east of the Missouri River are provided to a great extent with navigable streams, the Great Lakes, or the ocean. But the country from the Missouri River to the Sacramento is destitute of similar waterways, with one or two unimportant exceptions where a difficult navigation is possible for a part of the year. The two great mountain chains of the continent separate the East from the West; and the lack of navigable streams prevents communication by water through the intervening valleys. The territory not being supplied with its fair proportion of these highways of nature must otherwise depend on wagon transportation. For this, however, the distances are too magnificent. It is a country which railways only could develop; and much emphasis was placed on that fact at the time the aid was granted. That the prophesies regarding its development have been fulfilled will hardly be denied. The following observation on the change which has taken place was

made by General Sherman in 1883: "No person who  
 "has not been across the continent by the several routes  
 "can possibly comprehend the changes now in progress  
 "there. Nearly two-thirds of the domain of the United  
 "States lie west of the Mississippi; and at the close  
 "of the Civil War the greater part of it was occupied  
 "by wild beasts, buffalo, elk, antelope and deer, and  
 "by wilder Indians. Now, by the indomitable courage,  
 "industry and thrift of our people, this vast region has  
 "become reduced to a condition of comparative civiliza-  
 "tion. Three great railroads now traverse the continent,  
 "with branches innumerable; and a fourth is making  
 "rapid progress. States, territories, cities and towns  
 "have grown up; neat cattle have already displaced the  
 "buffalo; sheep and goats have displaced the elk, deer  
 "and antelope; and crops of wheat, rye, barley and oats  
 "are now grown in regions believed hitherto to be desert  
 "or inaccessible. This is the real cause of the great pros-  
 "perity which now blesses our country and swells the  
 "coffers of our National treasury" (Rep. Secy. of War,  
 Vol. I, 1882-83, p. 5).

Changes  
wrought by  
road.

#### THE PREDICTED BENEFITS REALIZED.

Though much more might be added illustrating the benefits realized by the Government and the people from the construction of the road, sufficient has been said to show that the promises made have all been kept. The resulting benefits to the Government and the people have exceeded the most sanguine anticipations of the advocates of aid. The railroad affords a sufficient protection to the Pacific Coast against foreign invasions; while it binds it with ties of daily increasing strength with the rest of the Union. The Indian wars have been practically brought



to an end ; and the transportation services for the Government are performed at a small fraction of their former cost ; while the development of the resources of what was the uninhabited West, and the homes which have thus been furnished to hundreds of thousands, is of value beyond all calculation. It was to secure these results that the aid of bonds was granted ; and it is the opinion expressed by those officers of the Government whose duties have brought them into familiarity with the facts, that even had the grant been a donation instead of a loan it would still have been more than justified by the results.

#### RAILROADS AIDED BY CANADA AND MEXICO.

If there is now a doubt in the mind of any officer of the United States as to the wisdom of the aid to the Pacific railroads, it is a sentiment not shared by the governments joining us on the north and on the south. The Republic of Mexico and the Dominion of Canada have made every effort and almost exhausted their resources to secure railroads to their distant frontiers and unite the scattered parts of their vast domains. The benefits to this country following from the subsidies to the Pacific railroads have, in the minds of the Dominion Government, justified the enormous subsidies to the Canadian Pacific. The summary of these subsidies is given in the Report on International Commerce of the United States, 1884 (p. 97 *et seq.*). It includes a loan of \$47,500,000, a donation of 25,000,000 acres of land, including only that suitable for settlement, the construction by the Government and transfer to the company free of cost of 714 miles of railway, estimated in value to be worth \$30,000,000, freedom from taxation forever, and protection from competition of parallel lines for twenty years from the date of its charter. The

concessions and subventions by the Republic of Mexico during the last decade have exceeded its present power to pay. Whether these Governments were wise in making such enormous subsidies, by comparison with which the grants by the United States sink into insignificance, it is not necessary here to inquire. That they have been made is sufficient evidence that in the judgment of our neighbors the benefits resulting from the construction of the Pacific railroads would have justified subsidies of much greater value than those which were granted.

#### BUSINESS PREDICTED FOR THE ROAD.

While these prophesied benefits to the Government and the country have been more than realized, there were certain predicted benefits to the companies which have as signally failed. It was expected that one-half the transportation charges for the Government and five per cent of the net earnings would pay the bonds and interest on or before their maturity. Both the majority and minority reports of the Committee on Pacific Railroads of the House of Representatives have called attention to this fact. The majority report says: "It was stated upon the floor of Congress, and generally believed, that the compensation then being paid out for transportation of mails and Government supplies, all of which would be carried by the roads along the routes aided, was nearly double the interest on the subsidy bonds, and that to retain one-half of said compensation would be sufficient, in the hands of the Government, to meet the interest payments, leaving the five per cent of net earnings to liquidate the principal and any interest left unsettled. So by the fifth section of the Act of 1864 it was provided that only

Failure of benefits promised companies.

One-half U. S. transportation and 5% of net earnings expected to pay the debt.

“one-half the compensation for services rendered for the Government by said companies shall be required to be applied to the payment of the bonds issued by the Government in aid of the construction of said roads.” (48th Cong., 1st Ses., Rep. 1431, H. R.)

The views of the minority, submitted as part two of same report, state: “The original Act of 1862, and the Act supplementary thereof of 1864, evidently contemplated that the transportation services for the Government would pay the current interest on the subsidy bonds, and that five per cent of the net earnings per annum, which would pay the debt in twenty years, would render the payment abundantly secure by extending the time to thirty years, being a margin of ten years over. At that time the expenditures by the Government for military and other transportation greatly exceeded the interest which would accrue upon the whole subsidy; but the construction of the road so changed the condition of affairs in the region traversed thereby, and so diminished the necessities of the Government for transportation, that it fell far short of the current interest, and resulted in a gradually accumulating debt, which it soon became apparent could not be paid under the provisions of the original law.”

The cost of transportation on the plains for several years prior to 1862, as reported to Congress during the discussion of the Pacific Railroad Bill, amounted, as has been shown, in times of peace, to the annual sum of \$7,357,781. This was at a time when the Missouri River formed the frontier line. As settlements spread westward, the territory to be protected was rapidly extended; and the expenses of army transportation were correspondingly increased. But had the charges made by the railroads been what they were prior to 1862, half the amount would have been sufficient

to pay the accruing interest; and there would now be no discussion as to how to provide for the deficiency. The fact of their amounting to but a fraction of their former sum is a circumstance of much greater importance and profit to the Government than if they had equaled the amount predicted. While this is the cause of the inadequacy of the United States lien, it is followed also by a gain to the Government in transportation charges much greater than the interest on the bonds. As the companies are held for the interest as well as the principal of the bonds, the failure of the predicted amount of charges for United States transportation is a misfortune to the railroad which largely adds to the benefits received by the Government.

A source of most profitable traffic which was predicted to pass over the Pacific railroad on its completion was the commerce between Asia and Europe. The commerce of the world was to cross the American continent. This was much dwelt upon as a prospective source of great revenue to the companies. For instance, the Government Directors of the Union Pacific Railroad, in reporting on the prospects of that road to the Secretary of the Interior, prophesied that, in adding this final link between the East and the West, a new thoroughfare would be formed: "Between Europe, California and China, we shall naturally become, to a large extent, the carrier of the world's products, and take the place that Venice and Holland once held" (Rep., Jan. 30, 1867).

Commerce of  
Asia.

But while the rails of the two roads were daily nearing one another, which were when joined to unite the Atlantic and Pacific, work was progressing on the opposite side of the world which led the waters of the Indian Ocean into the Mediterranean Sea. The Pacific railroad was completed May 10, 1869. In the following November, the Suez Canal was opened. The completion of the canal

Suez Canal  
competition.

dispelled all hope of carrying across America the trade between Asia and Europe. A portion of the commerce between the United States and China or Japan crosses this continent; but the commerce of Europe passes through the canal. On this subject we have the testimony of Mr. W. H. Whitely, the Custom-House Attorney for the Pacific railroad in San Francisco, who, in reply to a communication from the Treasury Department, says: "I have attended to the Custom-House business of the Central Pacific Railroad Co. since 1875; and, with the exception of silk-worm eggs, and two or perhaps three consignments of valuable furs for, I think, London, England, there has been no such thing as commerce between Asia and Europe via San Francisco, and there never will be so long as the Suez Canal is navigable. \* \* \* \*"

"There is a tradition in this office that, soon after the opening of the overland road, we received a consignment of raw silk for England; but I cannot locate it. No tea, to the recollection of the oldest inhabitant, has ever been consigned this way; and no sons of men now living will see such a transaction. Every effort has been made to increase what so many imagine to be an important commerce. It is of no use. The natural advantages of an all-water route in steamers via the Suez Canal cannot be overcome" (Rep. Internal Com. U. S., 1884, p. 111).

The development of the ocean freight steamer, which has occurred since the opening of the Pacific railroad, has further increased competition by sea, so that now not only does commerce between Asia and Europe go through the canal, but much traffic between China and New York also takes the same course. A large portion of the commerce also, between Oriental countries and the United States, has recently been diverted from American carriers over the Canadian Pacific line.



These predicted charges to the Government for transportation, and of large returns to the company from that and other sources, were the promises to the road on which the manner and time for the repayment of the bonds and interest were based.

Failure of  
predicted  
earnings.

When it was found that the predictions were not realized, the Thurman Act, in 1878, provided for the deficit by requiring an annual payment of twenty-five per cent of the net earnings from the companies. And now it is found that, if the whole of the net earnings were required from the bond-aided line, the sum, on the Central Pacific at least, would pay but a fraction of the accruing interest on the U. S. bonds. This result is caused by the reductions in rates which have constantly taken place on these roads (see Rep. U. S. Comr. of R. R's., 1883, pp. 5-6), and latterly by a loss of traffic through competition with other Pacific railroad lines which were also aided in their construction by the Government, as well as with the Canadian Pacific Railway, which not only has received enormous subsidies from the Dominion Government, but is not subject to the restrictions imposed on American roads by the Interstate Commerce Law.

#### CONCLUSION.

From the foregoing statement of facts, the following conclusions may be drawn as to the present relations between the company and the Government.

The contract obligations have all been complied with by the company to date. When it became apparent that the current payments on the bonds and interest as provided by the Contract Acts were not sufficient to provide for the debt when due, the company through its Board of Directors provided for the establishment of a sinking fund in its

treasury, which should be adjusted from time to time so as to fully pay the bonds and interest at maturity. The formal resolutions for that purpose were printed; and copies were placed in the hands of the proper officers of the United States. The Government, however, decided to take the matter from the company's charge, and, by the Thurman Act of May 7, 1878, assumed control of the matter by exacting certain annual payments into a sinking fund in the United States treasury. By the same Act (section 8), the company was excused from making other payments on account of its debt to the United States, except those provided therein. The company was also allowed (section 6) to pay dividends from any surplus earnings remaining after meeting the Thurman Act requirements. Following this assumption of the control by the Government, dividends which had been suspended in 1877, pending discussion of the debt settlement, were resumed in 1880.

*Had the control of the debt not been assumed by the Government in 1878, the company would have been able to provide for it.* The company's plan would have paid the debt. The net result of the Government's plan to December 31, 1888, is a loss to the road of \$2,000,000 by the wasteful investments of the sinking-fund money in the custody of the Secretary of the Treasury. This loss is nobody's gain.

The United States bonds issued are at the mileage rate named in the Act; and the company's bonds for an equal amount were also issued as the contract provides. The lien of the United States is subject to the prior lien of the company's bonds, and covers only the aided line of road (see 118 U. S. Reports, p. 235). The value of the United States lien which depends on the earning power of the aided line is far short of the debt, the accrued amount

Control  
assumed by  
Government.

United States  
lien.

of which, less the repayments thereon made by the company, is about \$50,000,000. Even if there were not back interest to provide for, the annual interest, amounting to \$1,671,341, would considerably exceed the current earnings.

The net earnings of the aided line, subject to the payments which are prior in lien to the United States bonds, represent the extreme sum which the company can be required to pay by any construction of the agreement. The annual amount of these earnings has shown a gradual decrease since the completion of other transcontinental lines; and now the competition of the Canadian Pacific, subsidized by the Dominion Government and not subject to the restrictions of the Interstate Commerce Law, further reduces our income and adds to the uncertainty of its future. The average net earnings of the aided line, including both the Central and Western roads, amount currently to about \$1,000,000 per annum; but, in three years out of the past six, they have fallen considerably below this sum. A payment on the debt amounting to \$1,000,000 a year could not be secured with certainty, except by the voluntary guaranty of other associated lines. Neither can payments be secured other than those now made, except by the consent of the company.

Aided line  
earnings.

All obligations of this company to the Government have been promptly and fully complied with. This is true not only as to the specified terms of the Contract Acts and all other laws of the United States, but also as to all implied promises or predicted benefits to the Government from the construction of the road. This is established by the foregoing extracts from the reports of Congress, the courts and commissions. It is shown on the same authority that the Government is delinquent in its contract obligations to the company, and continues to disregard the require-

All promises to  
U. S., both  
stated and im-  
plied, have  
been fulfilled.

ments of its own laws, and to ignore the decisions of its own courts. While the predicted benefits on behalf of the Government have been more than realized, those promised to the company have as completely failed. The United States bonds and interest, the amount thereof, the time and manner of their payment, as well as the lien therefor, *are all as specified in the Contract Acts and amendments.* The impairment of the value of the lien, and the changes in the amounts and manner for the repayment of the bonds and interest, the Government alone is responsible for.

Settlement  
must consider  
equities.

The position of the Government as to this loan is simply as a private creditor; and, if it were a private person, there would be no difficulty in effecting a settlement which would be just and honorable alike to the debtor and creditor. Such a settlement would consider not only the value of the security and the extreme annual payments possible to exact, but the equities would be stated as an offset to the mere legal demands. Not the least among these are the benefits realized by the creditor from the use of the property, which are all in excess of his expectations, and which are accompanied by and to a large extent are the cause of a corresponding failure in the promised returns to the company.

G. L. LANSING.

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# PACIFIC RAILROAD DEBTS.

## Anti-Funding and Foreclosure Memorial of California State Convention.

### MEMORIAL

ANNEXED TO PREAMBLE AND RESOLUTIONS,  
ADOPTED BY STATE ANTI-FUNDING CONVEN-  
TION, SATURDAY, JANUARY 18th, 1896, HELD  
AT METROPOLITAN TEMPLE, SAN FRANCISCO,  
CALIFORNIA, PREPARED BY COMMITTEE AP-  
POINTED FOR THAT PURPOSE BY THE CON-  
VENTION, WITH FULL POWER TO ACT.

The undersigned, a committee appointed for that purpose, with full power to act, by the Anti-Funding Convention held at Metropolitan Temple, San Francisco, January 18th, 1896, respectfully memorialize the Senate and House of Representatives of the United States, against each and every measure for refunding the secured indebtedness of the Central Pacific Railroad Company, and in favor of foreclosure of the mortgages given to secure that indebtedness.

Expressed in a sentence, the people of this State consider the welfare of the State itself to be involved in the new schemes of Mr. Huntington and his associates, and, with the earnestness and determination of men defending their property and their lives, denounce any conceivable plan of refunding and any failure or delay in foreclosure as destructive to them and to their descendants, as purely fraudulent, and as designed to place them completely and indefinitely at the mercy of those who are and have been their greatest enemies.

The issues to be considered in this Memorial, while of the greatest pecuniary importance, and to Mr. Huntington and his associates of no consequence in any other aspect, nevertheless transcend all merely monetary considerations, for the reason that they touch the sacredness and supremacy of the law, and in that way, the honor of the Government itself.

With the greatest respect, but positively, we object to any action whatever by Congress, or its committees, in the matter of the debt of the Central Pacific Railroad Company, as an unwarrantable interference, opposed to the spirit of our institutions, with the due and orderly administration of the law. The entire question is now ripe for judicial action, through the Executive, and, according to all precedent and in harmony with the distribution of powers in the Constitution, should be treated exclusively through those branches of the Government. As the Chairman of the present Committee on Pacific Railroads of the House of Representatives has already in effect announced, if Congress takes any action in this matter, it must act through the exercise of judicial powers, and this is opposed equally to the theory of our Governmental system, and to all just practice in the history of the United States. To arrive at a finding of fact and conclusions upon which any enactment could be intelligently based, Congress would be compelled to investigate enormous records and intricate facts which have accumulated within thirty years, and which, in a proper sense, are even now *sub judice*, and, if this work be not done under the rules and principles which govern Courts, and with judicial thoroughness and completeness, the basis for any possible legislation that would even wear the garb of justice would be wanting. And this essential process of investigation would necessitate the decision of numerous and complicated legal issues, for the determination of which the judicial department has been established.

The contracts between the Government and the Central Pacific Railroad Company are matters for judicial and not for Congressional interpretation. The facts which have transpired under and in relation to these contracts are obviously within the range of judicial enquiry and decision.

We submit, therefore, that this preliminary objection to any proposed legislation ought to be controlling. After foreclosure and such other action as the Courts may take, but not before then, it may be proper, or even necessary, for Congress to interfere.

But, if you do not agree to this preliminary objection, the merits of the controversy are now to be considered.

## The Facts of the Case—Their Significance and Their Bearing.

It is not true that the Central Pacific Railroad Company is an honest debtor, or that it is entitled to favorable treatment at the hands of Congress.

The facts are that, in 1861, the Central Pacific Railroad Company was incorporated under the laws of California. The Constitution of California prescribed then, as now, that "each stockholder of a corporation or joint stock association shall be individually and personally liable for his proportion of its debts and liabilities." (Sec. 36, Article IV, Constitution of 1849.)

The Supreme Court of the State of California interpreted this section of the Constitution in the case of *French vs. Teschamacher*, 24 Cal., 518, as follows:

"It is unconstitutional for the Legislature to relieve a stockholder of a corporation of his individual liability."

And as each stockholder of the Central Pacific Railroad Company, under the Constitution of the State of California, is bound for his proportionate share of all the debts and liabilities of the corporation, no act of Congress can now be passed which will legally relieve him from such responsibility.

The Directors of this corporation are also personally liable for much of its indebtedness. Directors of a corporation are trustees of an express trust. They are held to a strict accountability for all they do as such trustees. Their position is one of confidence, and when they violate their duty they are amenable to the law, and neither the great political or financial power of the individual nor of the corporation of which he is a stockholder and director can be justly or legally invoked to relieve any such director from the performance of these duties or from the responsibility which a non-performance of them imposes upon him.

Says Morawetz on Corporations (Section 243): "The directors of a corporation occupy a position of the highest trust and confidence, and the utmost good faith is required in the exercise of the powers conferred upon them."

## II.

The admitted facts show that, practically, four men, living in Sacramento, in the State of California, namely, C. P. Hunt-



ington, Mark Hopkins, Charles Crocker and Leland Stanford, incorporated the Central Pacific Railroad Company and essayed to build its road. None of these men were capitalists. The assessed valuation of all their property did not reach \$250,000. They were unable to build the road from their own resources. The Civil War was then going on. The Eastern and Western States of the Union demanded a closer and more intimate connection with each other. The time for the building of a national highway across the continent was propitious, and so Congress was spurred to an unusual liberality.

The people of California, although few in number, were generous to a fault. And the most munificent grants and donations ever made by a government or a people to a private citizen or a corporation were at that time made to the Central Pacific Railroad Company. The following is a statement of some of the principal grants and donations of land and money made :

Congress granted to this corporation every other section of land for twenty miles on each side of its contemplated road for the whole length thereof, and also on the Oregon branch of that system, amounting in the aggregate to 10,000,000 acres, of the value of fully \$12,500,000. It is reported that they have already obtained about that amount in sales of those lands. The Government fixed the value of its own adjoining land at \$2.50 an acre.

At the same time the National Government issued to that Company its mortgage bonds in the sum of \$27,000,000 (in round numbers), which now amount, principal and interest, to at least \$58,000,000.

In addition thereto, the State of California guaranteed the interest on \$1,500,000 of the bonds of the Company, and also granted to it thirty acres of land in the city of San Francisco, of great value, which, with another undivided interest of thirty acres more, is now mortgaged for \$12,283,000.

The several counties of the State contributed to the company n money and property \$1,500,000; the city of Sacramento deeded to it its river water front of the estimated value of \$1,000,000, and the same corporation acquired or held without consideration and contrary to the plain principles of law, more than ten

miles of the water front of the Bay of San Francisco, forming the entire harbor of Oakland, and parts of the harbors of Alameda, Berkeley and San Francisco, which is of the estimated value of not less than \$10,000,000.

It also obtained from Wells Fargo & Co. \$1,500,000 of its stock in consideration of favorable transportation facilities accorded to said company.

The foregoing grants reached the enormous amount in value of \$57,000,000, which is much more than the entire cost of the road.

Add to the foregoing the interest which Mr. Huntington and his associates obtained in every town through which the railroad passed, and also the acquisition of health resorts, donations of land for townsites, depot purposes, and in fact every known kind of property, and you cannot but appreciate the vast accessions of this corporation.

Those donations of land and money were not intended as a gift to Mr. Huntington and his associates, but they were designed to secure the early construction of a continental line of railroad, to be thereafter operated in the interests of the General Government and of the people of the Far West, and always under proper surveillance and control.

The incorporators of the Central Pacific Railroad Company were, to all intents and purposes, the agents of the Government and of the people. This nation confided to their keeping the largest amount of property ever in modern times granted by any government to an individual or a corporation.

### III.

Soon after the organization of the Central Pacific Railroad Company, C. P. Huntington and his three associates incorporated another company, under the name of the "Contract and Finance Company," and the same men were the owners of and represented both the Central Pacific Railroad Company and the "Contract and Finance Company." The directors of the Central Pacific Railroad Company contracted with themselves to complete the road of that company, under the name of the "Contract and Finance Company." They charged their own

prices for the work, and when finished, *they held most of its assets and some one else owned most of its debts*. Under these conditions, it is apparent that the asserted cost of the road was about three times as much as its actual cost.

Mr. Huntington has said he did not own 100 shares of stock. He did not dare to own stock in the company he had wrecked, because, under the Constitution of California, a stockholder is liable for a proportionate share of the indebtedness of a corporation, and as a director he was then, and is still, liable for these palpable frauds.

These same individuals and their successors in interest are now asking the General Government to relieve them from the liability which arose by reason of their illegal and fraudulent acts, in incurring this vast indebtedness, by providing a legal means for refunding it; and to accomplish this purpose, they propose to make a new contract under the forms of law whereby they will avoid their personal responsibility for the creation of the enormous liabilities now hanging over the corporation.

In this connection, it must be remembered that the bonded indebtedness which the United States assumed and agreed to pay, is but a small part of the actual nominal indebtedness of the corporation. According to Poor's Manual for 1895, the total liabilities of the Central Pacific Railroad Company reached the vast sum of \$202,491,584, while, under the estimates made by the United States Railroad Commission in 1888, the total cost of building and equipping the Central and Western Pacific Railroads did not exceed \$40,000,000.

#### IV.

Mr. Huntington and his associates at different times organized three corporations through which to carry on their railroad business in California:

1. "The Contract and Finance Company," which we have referred to, and under which corporation the Central Pacific railroad was built, and *whose books have been destroyed*.

2. "The Western Development Company." Exactly what this corporation was intended to "develop" can only be a matter of conjecture, but it continued in existence until its books

became laden with facts. These books, we believe, cannot now be found or its history traced.

3. "The Pacific Improvement Company." This corporation still exists, but is now in the painful process of liquidation.

The whole scheme is a deception and a fraud. The Pacific Improvement Company originally claimed to own the great ferry and all its appendages on the line of the Central Pacific Railroad at Port Costa; also the steamer "Solano," which is the only ferry boat in California that can carry a train of cars across the straits of Carquinez at that point.

The same company, we are informed, owned or claimed to own the railroad's interest in the bridge at Sacramento. It owned the ferry boat "Piedmont," that plies between Oakland and San Francisco, and which also forms a part of the Central Pacific Railroad Company's line. It owned the river steamers Modoc and Apache, the railroad office building at the foot of Fourth and Townsend streets, in the City of San Francisco; the Del Monte Hotel at Monterey; the principal part of the lands formerly belonging to the old company in and around North Berkeley, and the depots at Sacramento and Los Angeles. It claimed to own the Santa Monica wharf property, and the hotel at Lathrop, before it was destroyed, belonged to this company. It also owned the Central Pacific railroad wharf at San Pedro. It formerly owned or assumed to own, the Oakland Water front and the Mission Bay property, but it is said that these properties have recently been transferred. It owns the coal mines in the State of Washington and in Mexico from whence the Central Pacific obtains its coal, and it is publicly declared that the Pacific Improvement Company nets \$2,000,000 a year from the coal it supplies to the Southern and Central Pacific Railroad Companies.

Of course, transfers of property are so common, and some have been so recent, between these corporations, that we cannot attest the absolute accuracy of these statements at the present moment, but we believe they are correctly made.

Every dollar's worth of all of the above property, forms a part of the Central Pacific Railroad system and was bought on its credit. The Southern Pacific was also largely built on

the credit of the Central, and the latter has wantonly been made bankrupt to build up and maintain the Southern.

From the foregoing it can readily be seen how the Central Pacific Railroad people have used the money and the credit donated to it by the General Government and by the people of the State of California, for the purpose of destroying the security given to the Government for the very money furnished to build the road.

The same men, viz.: Huntington and his associates, under the name of the "Pacific Improvement Company" hold control over much of the private business and a large amount of the private property interests of California. To illustrate: They own all of the street railroads in San Francisco except, perhaps, two or three, and most of the street railroads of Oakland. They have gridironed the City of San Francisco with lines actual and prospective. To do this they commenced by issuing \$17,000,000 in bonds. They froze out all the old street railroad companies and now hold an exclusive monopoly of street railroading in this great city, and they control not only the passenger traffic, but the politics of the city.

They also own vast grants of land in other parts of California, to wit: In Amador, Yolo, Monterey and other counties. They own most of the steamers in the Bay of San Francisco and on the rivers of this great State. They control the only line of steamers via Panama to New York, and they also own the steam lines to China and Japan. They thus combine with the shipping interests by sea and land and fix the price of freight by both methods of transportation.

They even run our hotels and public resorts, because they control the means of reaching them by reason of their ownership of all the lines of transportation in the interior of the State of California, north of Tehachapi. They sell excursion tickets to their own resorts at prices that destroy all competition of other towns or resorts which they do not favor. It is true the people visiting the State are pleased by the apparent generosity of the railroad company, but in the end the producers of California are the sufferers and have to pay all amounts so expended.

These side corporations referred to have always held a large



part of the valuable assets of Mr. Huntington and his associates. At one time the "Contract and Finance Company" held for them \$35,300,000 of their property. (See Huntington's letter of Jan. 10, 1887, and Mr. Miller's answer of Jan. 27th, 1887, found in a report made in 1888 to the President of the Congress of the United States by the Railroad Commission appointed for that purpose.)

To make uncertainty more uncertain, Mr. Huntington and his associates not only destroyed the books of the "Contract and Finance Company," but, according to the reports made by those who investigated their affairs, it is claimed they also destroyed a part of the so-called "Record Book of Corporation Debts" (which book they were required by law to keep), namely, that part from page 48 to page 111, inclusive. What these pages so destroyed would have disclosed remains a matter of surmise. But, from a bird's eye view of the whole affairs of the Central Pacific Railroad Company and its manipulators, no one can be surprised that in a few years their railroad holdings increased from 1100 miles to 8,072 <sup>21</sup>/<sub>100</sub> miles, or that they wrecked many railroad corporations, large and small, during the same period, or that they are now seeking to set at defiance State and National laws and boldly destroy the security for national indebtedness.

The shippers of freight and passengers over the Central and Southern Pacific Railroads must in the end pay all the indebtedness, principal and interest, of those roads unless it is collected from the security.

For this reason the people of California are especially interested in keeping the amount of such indebtedness within its actual figures. In this connection it must be remembered that C. P. Huntington and his associates have become immensely wealthy in handling a corporation which they now say is bankrupt.

It must be borne in mind that one fraud is the parent of others. The very destruction of these books referred to is, in law, prima facie evidence of fraud, and in any court of justice would be taken strongly against the parties who destroyed them, and, in any department of the Government, if the amount involved was small, such an act would result in the immediate prosecu-

tion of the parties committing it; but the taking of a hundred millions of dollars paralyzes belief and makes even honest men hesitate to attack such a bold and immense fraud.

In the report made to the President of the United States by the Commissioners appointed under the Act of Congress approved March 3, 1887, entitled "An Act authorizing an investigation of the books, accounts and methods of railroads which have received aid from the United States, and for other purposes," it appears that Mr. Huntington and his associates, Hopkins, Stanford and Crocker, received \$142,000,000 in cash and securities through the "Contract and Finance Company," the "Western Development Company," the "Pacific Improvement Company," and the dividends of the Central Pacific Railroad Company; and it nowhere appears that they ever paid one dollar from their own funds toward the construction of said railroad.

In addition to this sum of \$142,000,000, they also made large profits by the operation of other companies which were directly or remotely sapping the revenues of the Central Pacific. The same company also expended \$4,818,355.67, of which the managers declined to give any explanation or to permit any explanation to be made by others.

It further appears from the same report that the gross earnings of the Central Pacific Railroad from 1863 to December 31, 1886, were \$274,139,116.27, and that the operating expenses were \$149,199,102.40, leaving the net earnings during the period above indicated \$124,940,013.87. This amount, at that time, would have more than paid the bonded indebtedness of the road.

The same committee (page 22 of their report) stated that the Central Pacific Railroad Company had paid \$2,361,154.88 for services by lawyers to influence legislation. These uncontradicted facts afford an insight into the methods adopted by Mr. Huntington and his associates in handling the property of the Central Pacific Railroad Company. It is settled law that a mortgagor of property cannot by his own acts destroy the value of the property so mortgaged and thus endanger the security, yet the Central Pacific Company has done this notoriously for years.

## VI.

In 1884, C. P. Huntington and his associates in the Central Pacific Railroad Company incorporated the Southern Pacific Company in the State of Kentucky under the especial provision prescribed in an Act of the Legislature of that State, and which Act prescribed that said company should never do business in the State of Kentucky. This provision has been eliminated by subsequent legislation. All in all, this was the most extraordinary proceeding ever devised. From beginning to end it was an open, bold, glaring fraud.

After the incorporation of the Southern Pacific of Kentucky (not a dollar of whose property was in that State), these same parties, viz: Mr. Huntington and his associates, leased from the Central Pacific Railroad Company all of its roads and equipments for a period of ninety-nine years. The terms of this lease are so iniquitous that any fair-minded man must admit that C. P. Huntington and his associates of the Southern Pacific Company succeeded in misleading C. P. Huntington and his associates of the Central Pacific Company.

We will not dwell upon the terms of that lease, or its effect upon governmental or other security further than to say it shows fraud on its face. It is an undeniable fact that Mr. Huntington of the Southern Pacific Railroad Company is still running a sharp bargain against Mr. Huntington of the Central Pacific Railroad Company, because most of the freight which was formerly transported east and west over the Central Pacific is now diverted from its natural channel, and is transported over the Southern Pacific road, the evident object being to bankrupt the Central Pacific, and this object has been well nigh attained.

A shipper who does not demand that his freight shall go by the Central, although destined to Chicago or New York, will find it sent by the Southern Pacific via New Orleans. In a word, the Central Pacific Company, though a citizen of California, and existing under its laws, is used as a most potential means of destroying the industries of the State.

## VII.

The people of California have other serious objections to the manner in which Mr. Huntington and his associates control the railroad property on the Pacific Coast.

For fifteen years last past the Central Pacific Railroad Company and the Southern Pacific Company have owed taxes to the State of California, always amounting to from \$500,000 to \$1,500,000, and for four years of that time, they owed \$400,000 to the School Fund of this State.

Immediately after the incorporation of the Southern Pacific Company in 1884, it leased the Central Pacific and became the arbiter and controller of all its business affairs, and by reason of the fact that the Southern Pacific is a foreign corporation, it may claim the option in all litigation to either bring suit or transfer suits already brought in the State Courts to the Courts of the United States; for instance, at this term of the Supreme Court of the United States, there is on the calendar for argument a case involving \$535,000, taxes due from the Southern Pacific and Central Pacific Railroad Companies to the State of California, and for taxes levied and assessed for the year 1887; yet the litigation involving these taxes has but just reached the calendar of the Supreme Court of our country.

The position thus assumed by the Southern Pacific Company of Kentucky is in most instances a denial of justice. No man who commences a suit against that company or against the Central Pacific Railroad Company, however just his claim, is certain when the action is brought, that it will not be transferred to the United States Courts. California, being a vast State territorially, the citizen in such a case who asks the Courts of Justice for vindication, is often deprived of any right in the premises.

## VIII.

The people of California are further interested in opposing the refunding of the indebtedness of the Central Pacific Railroad Company, because the welfare of the producers of California depends upon cheap transportation.

The Courts have held that a corporation is entitled to a fair rate of interest on its actual investment. The question

thus presented is what are the actual investments of the Central Pacific Company ?

If its liabilities are what it claims, viz.: \$202,491,584, then the shippers of California, if they undertake to pay the principal and interest on this vast sum, are helplessly and forever bankrupt, though the interest be but two or three per cent. per annum.

And, again, no competing railroad company maintained by private parties, can ever construct or maintain a continental line to the Pacific Slope, if the Central Pacific Railroad Company is allowed to refund its present indebtedness at two or three per cent. per annum, because private capital will not invest and compete with capital obtained at that rate. There can be no remedy for the present situation, which leaves the Central Pacific Railroad Company in its present management and in full control of this railroad property.

It has been epigrammatically said that California is the last of the slave States. In relation to its railroad transportation and to the influence of railroad corporations this is substantially true.

It is insisted by the people of this State:

1. That there should be no refunding act passed by Congress, and

2. That such steps should be immediately taken by the Government as will get back the money and property which have been fraudulently appropriated by certain parties connected with the management of the Central Pacific Railroad Company, and to that end, every department of the National Government should be called into immediate action. The honor of the American people is involved in this question. The stock and bonds of the Central Pacific Railroad are scattered broadcast throughout the financial world. The American Government has heretofore given this company character and credit at home and abroad; and to-day it stands as sponsor for what this company does. And yet, by an Act of Congress passed in 1887, a commission was formed for the purpose in part of examining into the affairs of this company and reporting the result to the President and Congress. That report was made



to and now forms a part of the record of the executive and legislative departments of the government.

It shows a mass of uncontradicted facts, judicially and dispassionately arranged and considered, which prove that the Government and the other creditors of this company have been robbed of from seventy-five to one hundred millions of dollars, and these facts have never been successfully questioned. and yet some of these same men, as the representatives of the Central Pacific Railroad Company, now come before this Congress and demand a certificate of character.

This demand has no parallel. The American people are honest, the American nation is honest, and we therefore ask that neither time nor distance shall change or modify the relations of the Government to this Company, or afford an excuse for the condonation of fraud. If the general Government should now stand behind C. P. Huntington and his associates in their efforts to refund the indebtedness of the Central Pacific Railroad Company, it would create a monopoly which would soon be more powerful than the Government itself.

It should not be forgotten in this connection that the very money which the Government of the United States and the people of California have contributed to this great railroad enterprise has been and is being used to corrupt and misdirect the legislation of the country, and thereby imperils the safety of the State. The men who represent these corporations now appear alike before the National and State legislatures, and even stand unabashed at the door of the temple of justice. They have no political principles. They belong to no party, are faithful to no trust, and just to no man.

The time has come when the people must make a declaration of independence against this corporation or they will become bankrupt in fortune and character.

If this is not done, private property interests in California will be destroyed, fortunes will be dissipated, industries will be imperiled and the whole people will be politically and financially crushed by a corporation more powerful than the State.

## Argument on the Existing Law as Applied to the Facts.

Representing the people of California, who will have to pay the debts wherewith these roads are left burdened, we confidently invoke the personal attention to the case of every public man to whom this memorial is sent. For several important considerations affecting it, we refer to a memorial addressed to Congress by the Committee of Fifty appointed by the monster meeting held at Metropolitan Temple, San Francisco, on December 7, 1895, of which a copy is herewith presented. Additional considerations now urged, refer mainly to the Central Pacific road with which we are more familiar, but we believe that most of them will be found applicable to the case of the Union Pacific, although upon facts, differing more or less in detail.

The Act of Congress of March 3, 1887 (Statutes at Large, Vol. 24, page 488) provides that whenever, in the opinion of the President, it shall be deemed "necessary for the protection of the interests and the preservation of the security of the United States, in respect to its lien on the Pacific roads, the Secretary of the Treasury and the Attorney General, under direction of the President, shall take the steps prescribed in the fourth section of said act, and among others, *"steps to foreclose any mortgages or liens of the United States on any railroad property."*

As the Attorney-General would have authority under the general powers of his office to take proceedings for the collection of moneys due the United States, this enactment must be understood as a special direction to the President to determine personally the time to act in the case of these railroad debts, as well as an expression of the judgment of Congress that foreclosure of the liens is the proper course, whenever the Executive shall decide that the time for action has come. As that Congress gave much attention to this whole subject of the Pacific Roads, its judgment, expressed in legislation, should command corresponding respect.

No public interests demand any further legislation now, nor has any been urged by the Executive, except a law to simplify and expedite the necessary legal proceedings by confer-

ring complete jurisdiction over the whole case on the United States Courts of the District of Columbia.

The time for action has evidently come, for the debt is past due and the security is inadequate; and it does not admit of doubt that foreclosure is the only proper and business-like course to pursue, for, independently of all moral and political objections to condoning such gross offenses as those here involved, there is another mortgage on the road, the holders of which claim priority over the government lien. This priority has been hitherto generally assumed without inquiry, but in ignorance of material facts recently brought to light. These facts are of record and incontestable; and their importance cannot be denied.

The amount involved (about one-fourth of the whole C. P. debt) is too serious to be lightly dealt with. This claim of priority must therefore be judicially determined; justice to the United States, and especially to the people of this Coast demands it, and this can only be done in a foreclosure suit. Such a suit, too, is the only way of securing the whole road, with its necessary appurtenances, towards satisfying the debt.

And all these appurtenances must be kept with, and belong to, the road or the latter itself becomes useless. A railroad cannot be operated without terminal grounds, ferry boats, where needed, bridges, rolling stock and like instrumentalities. Many million dollars in value of such property will therefore be lost to the public if Congress undertakes to deal with this question, without previous judicial ascertainment of the extent and particulars of it, belonging to each of the companies and justly subject to the Government lien.

Here are some notable examples of what we refer to:

The Union Pacific road possesses terminals in Omaha, Kansas City, Ogden and other cities on its route, of great value; those above named alone are estimated in the report of the Pacific Railway Commission at \$15,300,000. The company claims that they are not subject to the Government lien; a contrary opinion is expressed by others. The question is a judicial one and can only be determined by a suit wherein the lien is asserted and foreclosure sought.

Similarly, the State of California donated thirty acres in the heart of San Francisco to the Western (now Central) Pacific road, *expressly for terminal uses*, and the area has since been enlarged more than fifty per cent. by the closing of intersecting streets. As the Central Pacific road has no other terminals in San Francisco, this property is indispensable to the future use and value of the road. Claimed in foreclosure proceedings, it would doubtless be held to be an appurtenance to the road, incapable of severance from it. But if the case be disposed of by an Act of Congress, the contrary will almost as surely be the result. For the gentlemen who control and manage the Central Pacific have put a mortgage on these terminal grounds, under which they had issued at their last annual report (March 31st, 1895) bonds to the amount of \$12,283,300; and while it is quite safe to say that these bonds have never got into innocent hands, and that the transaction cannot stand for a moment if properly brought before a Court, yet if Congress extends the time for payment of the debt, it will go unchallenged until mere lapse of time will put it beyond the reach of legal redress.

Meantime the bondholders, who are, of course, one or other of the numerous companies, these people form, lose nothing; for they are getting interest on their bonds. For this fraud foreclosure is the only remedy; an Act of Congress cannot reach it, for no act of Congress can determine the title of land in California, or the rightful or fraudulent character of a conveyance. Here, then, in these terminal grounds of the two roads alone are at least \$27,000,000 worth of property to be either saved to the public by foreclosure or lost by refunding. What conscientious man, charged with the responsibilities of legislation, can feel warranted in voting for a law which waives, without enquiry, public rights of such magnitude?

There are, without doubt, many other cases of accretions to the mortgaged premises, which foreclosure would bring to light and secure, which would be lost by refunding. We have, for example, public record of a Central Pacific mortgage, dated April 1, 1889, covering a number of station grounds and the like, commonly supposed to be appurtenant to the road, but which,

this document suggests, are claimed by the managers to be distinct properties; and the instrument indicates that, in preparation for the worst, they have seasonably mortgaged them—to themselves.

What further instances of this kind the Union Pacific road may afford we are uninformed, but, in connection with the Central Pacific, we again direct attention to such things as the ownership of the ferry between San Francisco and Oakland, and that at Benecia across the Straits of Carquinez; we observe that the former of these is for certain purposes accounted in the reports and public acts of the company as a part of the road, yet we do not find in such reports any account of the large revenues of the ferry, and it would be an amazing and unprecedented thing if a property of such value were not found to stand in the names of the managers or one of their convenient corporations. We believe that the company's title to it and much other valuable property and the validity of the Government lien would be established in foreclosure proceedings.

Then there are the engines and rolling stock belonging to the road to be considered. It should all be identified, inventoried and ear-marked in any settlement. A little paint has often heretofore changed the apparent ownership of an engine or car, and may easily do so again. Nothing is more frequent here than to see engines and cars marked "C. P. R. R." running over roads other than the Central Pacific. Has Congress or any of its committees any inventory of this movable property, or any statement of its whereabouts?

In view of all the considerations affecting the question, we respectfully submit that the only safe and prudent way to deal with this problem is that which any business man would adopt in a similar case, viz: *first ascertain all the facts of the case authentically*, learn distinctly what are your rights and what can be secured by legal proceedings before entering into any treaty of compromise; make sure, too, that the facts of the case cannot be changed while settlement is under discussion. If you are taking property, look to the title and see that it is properly described and comes to you unincumbered. All this is the more essential where the conclusion reached is to take the form of



legislation which will remain effective, even though the considerations on which it was based proved false or fail. Here you are taking the facts on trust and assuming most unwarrantably that you know them all. You do not!

It is worthy of note, too, that none of these refunding bills come before Congress with any official sanction. They are not asked by the Executive to whose hands Congress has committed the business, nor are they even petitioned for by the companies concerned; they are all promoted by private suggestions or by the solicitation of persons whose private interests are affected. These are controllers of rival railroad lines, and persons who, having wrongfully misappropriated the assets and means of the subsidized roads, are interested in the condonation of their frauds, which all extensions and refunding schemes necessarily involve.

Mr. Huntington, the most conspicuous promoter of refunding, has publicly stated that he does not own more than 100 shares of Central Pacific stock; his interest in the question is, notoriously, as one of the original directors who divided among themselves the assets of the company, and as the head of the Southern Pacific, which afterwards took away its trade and reduced it to its present fallen and bankrupt condition!

Nor do these people even approach Congress with any formal statement of what they propose to do, or pretend they are able to do, in the way of discharging their obligations. They commit themselves to nothing whatever, they write nothing, sign nothing; their communications are made orally to committees, or individual members in private conversations; so that when they shall have secured the desired legislative condonation for the past they may violate every promise to the public made or intimated, and members whose votes they have won by such means will have nothing to show on which to justify their action. Legislation so promoted is always dangerous and objectionable, and generally vicious. To such we are indebted for all the mistakes and errors hitherto committed in railroad legislation, whether by Congress or by our State Legislatures. It is the constant resort of those who propose to profit by the imprudence, credulity or good nature of members of the legislative bodies, whose confidence they abuse.

It is time that such methods of dealing with great public interests and taking the words of interested railroad managers as a basis for legislation should cease. And as the means at command of Congress for ascertaining facts are quite imperfect, and, what is equally important in cases like the present, as it is powerless to prevent change of conditions pending investigation, judicial ascertainment of facts and custody of property involved are essential prerequisites to intelligent or safe legislation. This can only be done by foreclosure.

This proceeding is objected to by some persons because it is associated in their minds with government ownership and operation of the roads. But there is no necessary connection between the two ideas. On the contrary, Congressional settlement of the case is the most likely course to lead right up to State ownership. For it is morally certain that the Central Pacific road can never earn the amount proposed to be charged upon it, and the result must be that when the condonation of past offenses has been secured, the managers will abandon it to the Government. The great object of foreclosure is to ascertain with judicial certainty and accuracy the details necessary to be known before Congress can act intelligently to rescue what can be rescued from fraudulent alienation, and to secure the property against further incumbrance or change while that body is deliberating. The order and the priority of the liens, what specific property each of them covers, and what means of collection the law affords, outside of the mortgage, *i. e.*, who is liable for the deficiency, must all be ascertained by authority before anything else. This done, the terms of sale will be in order; and Congress may then interpose and define them. Its action will naturally be affected by the order of priority of the liens and the ascertained earning capacity of the road, when operated by an impartial receiver. Bidding at the sale should be open to all the world, not as contemplated by these refunding schemes confined to its present managers. There need be no fear of want of bidders, if people know what is included in the sale.

If the holders of the so-called "first mortgage bonds" are declared entitled to preference over the lien of the United

States, the government will pay them off under the Act of 1887, and be subrogated to their rights. But if their lien proves subordinate to that of the Government, they will have to combine and buy the road for their own protection or lose their money ; *and there will be other competitors.*

Each of these results is widely different from and vastly preferable to any refunding of the debt, which, if effective, saddles it on the people of this State, and perpetuates the control of the property in the hands of the same people who have had it from the beginning and who are responsible for all the disgraceful past. They first impoverished the company by misappropriating its assets to their own gain; then, by the use of its credit, built a rival road to be its most formidable competitor in business; and finally rented it to themselves under a flimsy corporate disguise for ninety years ahead, on terms which render it the mere satellite and hand-maiden of that competitor. Such a history ought to disqualify them from bidding on the property, instead of entitling them to an exclusive right to purchase it.

It is probable that most members of Congress who are considering this question are unaware of important facts which should be known, and which there are easy means of verifying. Is it, for example, known to them that the great Central Pacific Railroad Company is no longer a living organization ? that it has abdicated and abandoned its functions as a carrier and never turns a wheel or carries a passenger or a pound of freight ? and that the great bulk of its stock is held by people who fear to avow their ownership lest they be held responsible for its debts ? Such, however, is the fact. The original owners have, with one exception, sold out their holdings to persons residing abroad, who withhold their shares from transfer and decline to register their ownership, lest they be made responsible for the debts; the managers keep control of the organization by the use of proxies taken years ago from those in whose names the shares then stood. The road is leased to the Southern Pacific for three or four generations, and that concern pays \$10,000 per year rent expressly *to enable the great Central Pacific Company to keep up its corporate organization, i. e.* pay salar-

ies, keep an office and maintain a semblance of animation sufficient to avoid a forfeiture of its charter for *non-user*.

In the present hands it is not only a bankrupt but a fraudulent bankrupt, for it has alienated all its means to its own directors in fraud of its creditors. This is the concern with which committees of Congress condescend to treat and whose assurances they are expected to accept, through self-appointed agents, as if it were a living organization and its statements and promises of any value. The lease referred to went into effect January 1, 1894, and is printed in the annual report of the Southern Pacific Company for the year 1893, at pages 103 and 104.

## The Case Summarized—Its True Attitude—Existing Law Sufficient—Foreclosure, but No Refunding.

The proposition to Congress of the Central Pacific Railroad Company, personified by Mr. Huntington, may be condensed as follows:

“ When this corporation was formed, the four gentlemen, of whom I was one, who ultimately acquired substantially all its stock, were not worth more than half a million. It was a period of civil war, and a transcontinental railroad was needed for military and mail facilities. The patriotism of the people was intense. The four availed themselves of the opportunity, and the railroad was constructed to Promontory. They formed originally a partnership and afterwards a corporation, named the Contract and Finance Company, which was succeeded, for other enterprises, by the Western Development Company and the Pacific Improvement Company, and all these corporations, directed by the same men, dealt with each other. The upshot of the business was that, largely out of the securities which the Government and other bondholders nominally held, while the management was vested in their debtor, and by innumerable transfers and conversions of the property and the income of the Central Pacific,—the Southern Pacific Railroad, to which the business of the original corporation was diverted as rapidly as possible, the California and Oregon Railroad, and numerous local lines, were constructed and acquired, and the four gentlemen referred to, and their heirs and devisees, have accumulated property to the value of at least a hundred and fifty millions.

“ Now, through these proceedings, the chief assets of the Central Pacific have passed to other companies and to private ownership. That corporation, in its present condition, is unable to provide for or pay its debts. I, C. P. Huntington, the survivor of the four, and representing the Central Pacific Railroad Company, which will cease to exist in 1911, ask you, the Congress of the United States, to refund its indebtedness for 100 years, to establish two per centum per annum as the rate of interest, to ratify and confirm all the transfers and conversions to which I have alluded, to forego every legal remedy the Gov-



ernment now possesses, and to give me the power to collect so much of the refunded debt as I or my successors may choose to pay, primarily from the producers of the Pacific Coast, and secondarily, from the people of the United States."

This, in fairness and justice, is the substance of the proposal Mr. Huntington makes to Congress, thus invoking the Legislative arm of the Government to thwart and paralyze the Executive and the Judiciary, and, speaking of him in his representative as well as his personal capacity, to intrench him and his accumulations with fortifications that would defy the Constitution and the laws and every principle of justice and of right.

The mere fact that such a monstrous demand can be boldly and even defiantly made, is such a commentary upon the times as no words could emphasize. If the public response, though filtered through conventions of solid and deliberative character, is thick with indignation, and sometimes couched in language unusually direct and severe, it is no ground for surprise, and scarcely for criticism. If an average citizen perjures himself, or commits larceny or embezzlement, he is tried and punished, and there is no application to a legislative body to condone his crime or to obliterate the facts he has created. Under a constitutional government, resting upon law and order, depending upon equality of right among free citizens, and supposed to be quickly and effectively moved by the enlightened opinions of an educated constituency, it would be indeed surprising if the people should tamely and frigidly accept such false, boundless and oppressive, assumptions and pretences as constitute this entire appeal of Mr. Huntington and the Central Pacific Railroad Company.

The whole issue about the railroad debts is now covered by the Constitution, the Federal Statutes and well established legal principles. The solution of the question demands only the faithful application of the law to indubitable facts. It is the duty of the Executive Department of the Government to set the Judicial Department in motion. The attitude of our people is that the *existing law* should and can determine the controversy and preserve the rights and interests of the Government and its constituents. If the manipulators of railroads, in the act

of managing the security, have wasted, diverted and converted to their own use the greater part of its value, *then they and the estates of those deceased are trustees*. Let the security be rehabilitated and the mortgage foreclosed, within the broad and well defined rules of equity.

The railroads should be treated like other debtors. Probably your constituents, at least those among them whose covetousness transcends their patriotism, would like to have their debts refunded by a paternal Congress at two per centum per annum, while the Government borrows money to keep up its Reserve Fund at double that rate of interest. Suppose that proposition was before you, how promptly you would defeat it! Why should Mr. Huntington and the special interests he represents be favored beyond the mass of American citizens? Why should you be asked to discriminate for the benefit of a corporation against the entire country, in general, and the Pacific States in particular? If, to the Southern Pacific Railroad and private fortunes, the security pledged to the Government and the other bondholders, or its proceeds to the amount of two hundred millions or more, have been traced, let the deficiency be reached *there*, and not be made up by enforced contributions from *our* capital and *our* labor.

But it is said that it is wrong to express or convey suspicions of Congress and its Committees. No one on this coast *has* expressed or implied those suspicions. Like other attacks made upon individuals, they are a mere assumption of the railroads, and diversions intended to influence your action. We have referred only to the past, and, in many places, with Mr. Huntington himself as our authority. Is it not notorious that great reputations were tarnished through association with railroad frauds? And when Mr. Huntington wrote confidentially to his friend and business associate David B. Colton, did he not accuse the Congressmen of that day of corruption, and express his opinion of them in language that would redden the cheeks of any ordinary American? Why should he be permitted now to maintain a lobby and work secretly and selfishly at Washington, to carry on new schemes of plunder, in order to transfer his burdens to the people, and retain the

money and property, to which the Government is entitled, and which it can secure without an additional stroke of legislation.

Let any member of either branch of Congress read the report of Hon. Robert E. Pattison of Pennsylvania, as a member of the U. S. Pacific Railway Commission in 1888, from which we have already extracted, and see how every phase of the present situation is anticipated. That report is crammed with facts and figures, arrayed without heat or prejudice, and answering every possible element of the argument for refunding, and against foreclosure. If, September 18, 1871, the President of the Central Pacific Railroad swore in the Department of the Interior that the paid up stock of that corporation was \$54,260,190, when in truth it was \$760,000, is that statement less false now than it was then? If, December 31st, 1886, the net earnings of the Central Pacific had been \$124,940,013.87, does that show any tendency towards bankruptcy? If, in pools, subsidies, rebates, etc., the Central Pacific has paid out \$9,882,799.61, is not the Government entitled to the benefit of that fact with all the additions since? If, by fraudulent methods, by contracting with themselves, which is the worst fraud that trustees can perpetrate, the manipulators of the Central Pacific had issued to themselves bonds and stock, representing \$82,727,800, is this circumstance now to be ignored? If Stanford, Huntington, Hopkins and Crocker, through the Contract and Finance Company, the Western Development Company and the Pacific Improvement Company, and dividends of the Central Pacific, received in cash and securities, more than \$142,000,000, and also rentals, aggregating \$29,912,373.49, is this to be condoned because Mr. Huntington now says the Central Pacific is unable to pay its debts? If other frauds, including construction, the handling of land grants, and numerous other items, had been exactly ascertained, when Governor Pattison wrote his report, and have been fearfully augmented since, do these facts appeal to Congress on behalf of the railroads or on the side of the people? If books and vouchers were destroyed, false liabilities created, and five or six millions of dollars disbursed for corrupt purposes, does it not follow, as Governor Pattison said, in relation to the Central

Pacific, "that no part of its indebtedness can be recovered "except through immediate compulsory legal process," and "that 'extension of the time for payment, therefore, means an "increase of the amount of the debt and the making of its "recovery more hopeless.' "

If the debt be refunded, and the time of payment extended moreover, what will be the condition when the corporate existence of the Central Pacific ceases at the end of fifty years from its organization? If the principal debtor expires what new complications will surround the debt?

These are matters which cannot be elaborated, in the midst of the present controversy, but which are so well understood as to be part of the authentic history of the times, and they all point to the unavoidable conclusion that refunding and the defeat of foreclosure are only designed to obliterate legal responsibility, to condone such frauds as are almost without precedent, to preserve enormous private fortunes and the Southern Pacific Railroad from all possible attack, to shift the burden of the indebtedness from those who contracted it, and to force the people, who actually built the Central Pacific, to pay for it two or three times over, out of their own resources, and without diminishing the fraudulent accumulations of those who aspire to be their masters.

Republicans, Democrats, Populists, the San Francisco Chamber of Commerce, other organized bodies, citizens of all shades of political opinion who have made the Pacific States what they are, and have stood by the Union and the Government, are virtually unanimous against refunding and for the foreclosure of the rehabilitated security. As practical statesmen, what do you, gentlemen of both Houses of Congress, say to this demand? Is Mr. Huntington stronger than nine or ten of the sovereign States of this Union, stronger than the Union itself, stronger than the law, than justice, than common honesty? We do not believe that he is, and we confidently appeal to you for protection. To the argument that we ought to protect ourselves against those whom we claim to have debauched our politics, and, to some extent, our law, and to have interfered with and controlled our business, paralyzed our enterprise and

checked our progress, while they have absorbed not only our profits, but large parts of our capital, we answer, that in those phases of the controversy, which are purely local, we *are* interposing, and propose to interpose our strength as citizens and voters, but that, in that portion of the fight which has been transferred to Washington, we are forced to rely upon the most powerful legislative body in the world—the Congress of the United States—which owes its existence to the people, and which, in theory at least, and, as we hope, in practice also, represents the people and their rights and interests, and not railroad monopolists and corruptionists.

The conclusions we desire to formulate are:

*First*—That, even though the Central Pacific Railroad Company be technically insolvent, still refunding is not, and foreclosure is, expedient.

*Second*—But that corporation is not insolvent if its assets, as under the law they ought to exist, are sufficient to pay its indebtedness.

*Third*—That its assets have been transferred and converted to an amount more than adequate to the complete rehabilitation of the security.

*Fourth*—That, in a suit for foreclosure, the withdrawn assets can be restored, wherever or in whatever form they may exist, the solvency of the corporation established, and the whole indebtedness collected.

*Fifth*—That, in order to consider all these questions, Congress has, in effect, to exercise both Executive and Judicial powers, and, by the investigation of a committee, virtually to usurp the functions of two co-ordinate departments of the Government.

*Sixth*—That, without denying or even discussing the abstract proposition, that Congress, by a mere inquiry, may determine for itself the status, in fact and in law, of the relations between the Central Pacific Railroad Company and the Government, nevertheless it is obvious that, under existing conditions, such an inquiry is not only inexpedient but improper.



*Seventh*—That it is manifest, therefore, that the present situation of the secured indebtedness should be left to the action and the determination of the Executive and Judicial Departments.

*Eighth*—That, after foreclosure, and the judicial determination of the facts, and the law, and of the precise condition of the secured indebtedness of the Central Pacific,—in other words, when the proportion of the actual, not the nominal, security to the debt has been ascertained, and the usual and ordinary means of rehabilitation and collection exhausted,—then, and not before then, legislation by Congress may become proper and expedient.

*Ninth*—But that, meanwhile, the supremacy of the law, the inviolability of contracts, and the rights and interests of the Government, should be sacredly maintained, and there should be no condonation through legislative action, intercepting judicial proceedings, of fraud and conversions, and no sacrifice of the people at the mere behest of Mr. Huntington and his associates, who are incompetent to sit in judgment upon their own case.

Dated San Francisco, January 31st, 1896.

M. M. ESTEE.

ADOLPH SUTRO

HENRY E. HIGHTON.

J. L. DAVIE.

A. CAMINETTI.

E. M. GIBSON.

MARION CANNON.



AN ADDRESS  
TO THE  
MEMBERS OF THE LEGISLATURE  
OF THE  
**STATE OF KENTUCKY.**

By L. D. McKISICK.  
♦ ♦ ♦

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GENTLEMEN: Some time ago I addressed the lawyers in Congress upon the subject of funding the debt which the Central Pacific Railroad Company owes to the United States. I am told that you desire to be informed upon what grounds and for what reason the people of the State of California are appealing to you to repeal the charter of the Southern Pacific Company, and I have been requested by reputable citizens of the State to state those grounds and give you the reasons, or some of them, why you ought to repeal that charter. With reluctance I have consented to do so, assuring you that I would not have consented to comply with the request of my fellow citizens if I felt the least doubt of your willingness to be informed, or of your desire to do justice to your fellow citizens of a sister State if you shall be convinced that your predecessors in the Legislature did do them an injustice.

As you know the original Act chartering the Southern Pacific Company was passed by your Legislature in 1884. Prior to that year, as all Californians know, Mr. Huntington and his associates, owned and were operating nearly all of the important railroads in the State. In a word, they almost monopolized the entire passenger and freight traffic of the State. There were so many lines operated by them, so many contracts broken

or violated by them, so many persons injured by them, that they were in constant litigation; that litigation was, of course, carried on in the State Courts where it rightfully belonged. Mr. Huntington and his associates, whether with or without cause, believed that they could not always get justice in the State Courts. Besides this, the State Constitution of 1879 gave them a great deal of trouble. By that Constitution a State Board of Railroad Commissioners was created and invested with power to fix schedules for freights and fares and to change the same from time to time. The Constitution also invested the State Board of Equalization, with power to assess railroad property for taxation. The Constitution also prohibits any railroad company from granting free passes or tickets at a discount to any person holding any office of honor, trust or profit in the State. It also prohibits a president, director, officer, agent or employe of a railroad company from being interested, directly or indirectly in furnishing material, supplies, etc., to the company; such, for instance as had been done in the construction of the Central Pacific and other roads. This Constitution is odiously obnoxious to Mr. Huntington, and he and his associates set about devising a scheme by which they could in some way get from under the obnoxious provisions of the Constitution, and get their litigation into the Federal Courts.

This scheme, nor any such scheme, could not be made to succeed under the Constitution and laws of California. But they were shrewd enough to know that if they could get a Company chartered in some other State, the law would conclusively presume that the corporation was a citizen of the State which created it, and that therefore they could, by virtue of such citizenship, carry their litigation out of the State courts into the Federal courts.

It seems that Mr. Huntington had, before 1884, been engaged in operating railroads in your State, and had made some friends of, or had acquired influence over some of, your most respectable citizens, and without disclosing to them, certainly not to many of them, the full measure of his purposes and schemes, he prevailed upon them, to assist him in obtaining the charter of the

Southern Pacific Company. Whether the charter as originally drafted was passed, or whether he was compelled to allow it to be so amended as to prohibit the Company from transacting railroad business in your State, you best know. But, as he did not intend to do business in your State, he was perfectly satisfied then with the charter, and put in his pocket and brought it to this State in which he did intend to utilize it, and I assure you that he has done so almost to a limitless extent.

Now, I ask you whether, if anybody from any other State were to come before you and ask you to grant him a charter similar to that of the Southern Pacific Company, fixing therein its capital stock at \$1,000,000, and were to frankly tell you that he did not intend to use the charter in the State of Kentucky, but that he did intend, without organizing his company there at all, to take that charter and go into a sister State and there organize his company, increase its capital stock to \$150,000,000 and create a great railroad monopoly by leasing all the railroads operated in that State to his Kentucky company for ninety-nine years, without any regard to the laws of that State and in direct violation of them, for railroad corporations in California cannot exist longer than fifty years, and proclaim to the world that his Kentucky company had a paid-up capital of \$118,000,000, paid for by railroad stock of the companies in the State where he was operating and which he had leased, every one of which railroads was mortgaged for its full value or more, would you, as members of the Legislature now in session at Frankfort, grant any such charter?

I say I think every one of you would feel that you had been insulted by such a proposition. There are no men in the United States who more readily see an insult when offered them or more readily resent it than the citizens of Kentucky. If the members of the present Kentucky Legislature would not do what I have assumed they would not and for the reason I have assumed, there is another quality or characteristic that belongs to the citizens of Kentucky. That is, when they have unwittingly and unintentionally wronged any man, and the fact that they have so wronged him comes home to them, they are as quick to right the



wrong as they are to resent an insult. Now, California is a long way from Kentucky. They are sister States, to be sure, but by reason of the distance which separates them their relations are not very intimate. The consequence is that Californians very much more accurately know the injustice and injuries which have been perpetrated upon them by the Southern Pacific Company than the Kentuckians know. And when the Californians appeal to the Kentuckians to be relieved of the incubus which they have put upon them in the name of the Southern Pacific Company, those Kentuckians ought to lend a willing ear to all just complaints made to them by the California people.

The people of California claim, and rightfully claim, that the Southern Pacific Company has done them injustice in a great variety of ways. They know very well that the merchants, whom Mr. Huntington says do not complain, are constantly complaining, but they will not tell about their wrongs for fear that the Southern Pacific Company will inflict greater wrongs upon them. The citizens of California generally believe that it is a great outrage that they cannot have the wrongs and injuries which the Southern Pacific Company inflicts upon them redressed in their own State courts. The people of California believe, and are justified in so believing, that the Southern Pacific Company has created in California a great monopoly. Monopolies are everywhere odious to all people. I do not believe that the members of the Legislature of Kentucky would be willing for any foreign railroad corporation to come into the State of Kentucky and gather up and operate all of the principal roads in that State. If I am right in that, those members can appreciate the feelings of Californians on the subject.

I admit that foreign corporations can go into other States and transact business under certain limitations and restrictions. Their right to do so is founded upon the doctrine of comity, which, to put it plainly, means that one State says to another State: "If you will allow my corporations to go into your State and transact business your corporations may come into my State and transact business. But your corporations must be honestly organized under your own laws for the primary pur-

pose of carrying on business in your own State. I will not allow you to organize a corporation and spawn it upon my people which you expressly prohibit from doing business in your own State."

Some years ago, the Legislature of the State of Pennsylvania chartered a corporation by the name of the Land Grant Railway Company, whose charter contained a provision similar to that of the proviso to Section 1 of the charter of the Southern Pacific Company, which declares: "that said corporation shall not have power to make joint stock with, lease, own or operate any railroad within the State of Kentucky.

The Land Grant Railway Company migrated to the State of Kansas and set itself up there to transact business. It got into litigation with Coffee county. The case ultimately went to the Supreme Court of that State, and is reported as "Land Grant Railway Company vs. Coffee County," 6 Kansas, page 254. The opinion of the Court was delivered by Judge Valentine, and is one of the most exhaustive examinations of the doctrines of comity to be found in any law book.

In the course of the opinion, he said: "No rule of comity will allow one State to spawn corporations and send them forth into other States to be nurtured and to do business there, when said first-mentioned State will not allow them to do business within its own boundaries. \* \* \* Is the State of Kansas bound by any kind of courtesy, or comity, or friendship, or kindness to Pennsylvania to treat this corporation better than its creator (the State of Pennsylvania) has done? It can hardly be supposed so, when we come to consider how carefully our own constitution has guarded the creation of corporations in our own State."

Certainly the Constitution of Kansas has not more carefully guarded the creation of corporations than has the Constitution of California: Article 12 of our Constitution is devoted exclusively to private corporations, and contains twenty-four sections. I know that the Legislature of Kentucky amended the charter of the Southern Pacific Company in 1888, and provided therein: "Section 1. That the Act entitled an Act to Incorporate the

Southern Pacific Company, which was approved March 17, 1884, be, and the same is, amended, by adding to Section 1 thereof the following words, to wit: Except subject to, and in conformity with, the provisions of the laws of the State of Kentucky, applicable to railroads, and acquiring no special rights that may be possessed by any railroads in the State, except the general and ordinary rights of common carriers as possessed by railroads generally."

Suppose the Legislature did so amend the charter of the Southern Pacific Company. While I am not familiar with the laws of Kentucky relating to the charter of railroad companies, you will see that by this amendment the Southern Pacific Company is especially prohibited from acquiring any special rights that may be possessed by any railroads in the State. The amendment does not meet the requisitions of the law of comity, and the Southern Pacific Company is, in my opinion, as obnoxious to the laws of California to-day as it was under the original charter of 1884. But the amendment was not obtained by Mr. Huntington for legitimate and honest purposes any more than was the original charter. That is manifest for the reason that within the eight years which have elapsed since he obtained that amendment, the Southern Pacific Company has never returned to its original home or transacted any business whatever in the State of Kentucky. Now, I put it plain to you, whether you think it right to perpetuate this monster monopoly upon the people of California when you have denied to the Southern Pacific Company the exercise of its franchise and corporate powers upon as favorable terms as your legislature gave to your Kentucky railroad corporations.

The crowning act of oppression which the Southern Pacific Company imposed upon the people of California was the bill filed by it sometime ago in the Circuit Court of the United States to enjoin the Board of Railroad Commissioners from putting in force their schedule of freights and fares within this State. I ask the members of the Legislature of Kentucky how would they like to have a foreign corporation spawned upon them by some other State to come into their State and com-

mence proceedings in the United States courts to enjoin the constitutional officers of their State from discharging their duties faithfully on behalf of the people of Kentucky?

But I am told that some of you oppose the repeal of the charter upon the ground that such repeal would destroy vested rights and work injustice to many innocent persons. In the first place I do not know that there are any innocent persons in any way connected with the Southern Pacific Company. But if there are, when they become so they were bound to know that the Legislature had, under the reserved power, the right to repeal the charter.

The repeal of the charter would not anul or impair the obligation of any lawful contract the Southern Pacific Company may have entered into under its charter. The effect would be simply to prevent it from exercising its franchises in the future, and require it to wind up its affairs, and if it owns, as Mr. Huntington says it does, \$118,000,000 worth of property, surely it can pay its debts and respond to all its obligations.

I have not gone over all the ground, or enumerated all the reasons why the people of California are appealing to you to repeal the charter, as Mr. Huntington said to Senator Morgan the other day, it would take a hundred years to do so, but I assure you that the appeal is made in good faith and by more than 200,000 of our citizens. The number which signed the *Examiner's* monster petition to Congress against a funding bill, those same citizens would as cheerfully sign a petition to you, asking you to repeal Mr. Huntington's charter. But they have more faith in your sense of right and justice in this matter, for it lies in narrower limits, than they have in the members of Congress who cannot, each for himself examine the complex questions involved in the proposition to fund the Union and Central Pacific debts.

In behalf of those appealing and trusting citizens, I have written as I have, to you, and await your action with confidence that you will respond to their appeal favorably.

L. D. McKISICK.

San Francisco, February 24, 1896.





[REPRODUCED FROM THE SAN FRANCISCO "STAR," FEBRUARY 15, 1896.]

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# THE FUNDING INFAMY

AND

## Pacific Railroad Villainies.

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THE VOTE MAKING A SECOND MORTGAGE.

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Nine Hundred Millions Prior Claims if  
Extended.

[<sup>87</sup> John H. Burke].

By Act of Congress of 1862, the so-called six Pacific Railroads were granted by the United States a donation of lands to build a line of railroad and telegraph from the Missouri River to the Pacific Ocean. The United States also loaned the roads in bonds \$64,623,512 to be repaid in thirty years with six per cent. interest, the bonds to be issued at the rate of \$16,000 per mile in the valleys, \$32,000 per mile in the foothills, and \$48,000 in the mountains.

At this time Leland Stanford and his associates had just formed the Central Pacific Railroad of California with T.

D. Judah, who was the real brains of the enterprise, as Engineer, and the original articles filed at Sacramento show that 12,000 shares had been subscribed by various parties, and \$12,000 paid in, and this sum is presumably about all that the projectors can prove was put in of their private funds to carry out what was then the Dutch Flat swindle.

In 1861, Stanford managed to be elected Governor of California, and about that time was passed by the Legislature of that State the bill to have the State pay the interest on \$1,500,000 of bonds till maturity.

The manner in which this bill became a law, and how the speaker decided that a morning session and an evening session between sunrise and midnight of the same twenty-four hours are two days—is a part of the unsavory history of this State, especially as it enabled the coterie to get a start in their subsequent career of crime.

On the main line of said roads the limit of bonds allowed by law was \$50,000,000. Yet the Secretary of the Treasury issued \$55,092,192, making a seemingly fraudulent and over-issue of over \$5,000,000.

Bonds for the mountain part were issued down to within about seven miles of Sacramento, and the officials may be able to explain how this was done and whether by substituting one map for another without the knowledge of the President of the United States they moved the base of the mountains down into the valley.

Not satisfied with the aid thus acquired and the munificent donation of lands, both from the United States and State, city and counties, for the counties and State have subscribed vast sums, and tide and other lands have been donated, amounting—to all the roads—to \$20,000,000 or more, the cormorants determined to make the government mortgage of over \$25,900 per mile practically valueless, and with that end in view, got the United States Senate and House—by less than a majority of the members of each body in 1864—to pass a bill providing that the government claims of over \$64,000,000 should become a second mortgage or subsequent lien on the road, and permitting the roads to issue alike amounts of bonds that should take precedence and be a first lien.

The manner in which this was accomplished is known only to the railroad managers and the members themselves,

some of which members were undoubtedly deceived, and others of whom then, or later, figured on the pay-rolls of certain of these roads.

It is admitted that in 1864 many men looked at these matters from a different standpoint than at this time, and while we have no desire to harshly criticise any man, we cannot commend the judgment of the men who voted for the measure by making the government lien a second mortgage, since the effect was to place ahead of it a mortgage of about \$25,900 a mile, and the road, taking one mile with another, did not cost that.

The roads, having by means best known to themselves seemingly, early determined that they would pay neither interest nor principal of the debt, and to that seeming end have long devoted every energy and device.

By every rule of common sense, law, and commercial usages, the interest on a debt is due at least annually and generally semi-annually, but these cormorants by some means, occult or otherwise, managed to secure a decision of the Supreme Court of the United States to the effect that interest could not be collected till the principal became due or at the end of thirty years.

At the end of thirty years there would thus be due, subject to some credits for transportation and amounts in sinking fund, under the Thurman bill:

	Totals.	Per Mile.
Principal .....	\$ 64,623,512 00	\$25,940 00
Interest .....	116,322,360 60	46,420 00
	<hr/>	<hr/>
Both .....	\$180,555,972 60	\$72,369 00

In detail as follows:

Roads.	U. S. Bonds Loaned Co.	Simple Int. 30 years.	Principle and Interest.	Miles.
U. Pac.....	\$27,236,512	\$49,025,721 60	\$76,262,233 60	1038.68
C. Pac.....	25,885,120	46,593,215 00	72,478,435 00	737.50
Kan. Pac.....	6,303,000	11,345,400 00	17,648,400 00	392.94
Westn. Pac.....	1,970,560	3,547,048 00	5,517,608 00	123.16
Sioux City .....	1,628,320	2,930,976 00	4,169,296 00	101.77
Cen. Br. U. P.....	1,600,000	2,880,000 00	4,480,000 00	100.00
	<hr/>	<hr/>	<hr/>	
	\$64,623,512	\$116,322,360 60	\$180,555,972 60	2495.95

The true value of the aid extended, and that should be justly due by the companies though it cannot be lawfully

collected, is to compute the interest at savings bank rules, making at the end of these years:

Principal .....	\$ 64,623,512
Interest .....	387,741,072

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Total .....	\$452,364,584
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And to secure this sum the United States has a second mortgage on 2495 miles of road; also on all lands, also on roads merged or consolidated with these companies, subject only to prior claims of a little over 64,000,000 and liens on other roads prior to the consolidations.

Senator Frye and others propose to punish Huntington and his pals by extending the payment of all debts due the United States for fifty or one hundred years.

It follows that if the debt is extended, the United States cannot sue Huntington and his pals for fraud, and its claims would be subsequent to all other claims, liens, and demands of every nature, including all bonds of said companies, and leased lines, and also claims under leases for dividends on stocks of leased lines, and instead of there being only \$64,623,512 claim ahead of the United States it is possible it would be approaching \$937,944,956, divided as follows:

Bonds of C. P., S. P., and leased lines .....	\$213,862,893
Bonds Union Pac. and leased lines .....	282,369,924
Bonds Sioux City and Pac .....	1,750,665
Bonds Cen. Branch U. P .....	4,465,877

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	\$502,449,359
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Stock of leased lines:

U. P. System .....	\$117,036,856
C. P. & S. P. System .....	318,458,650

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	\$435,405,506
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Possible annual interest or rentals which might be ahead of the claim of the United States \$56,276,697.90, or nearly as much as the total claim now ahead of the United States.

It therefore follows that if there be any leg-pullers in Congress that C. P. Huntington could, and presumably would, submit to a lively tug.

—JOHN H. BURKE.

Senator Pettigrew on the Pacific  
Railroad Swindles.



[ *Reproduced from "SAN FRANCISCO EXAMINER," Friday Morning,  
February 14th, 1896.* ]

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## Speech by Senator Pettigrew of Dakota.

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*Delivered in the U. S. Senate, February 13th, 1896.*

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"The stockholders and owners of the first mortgage bonds of the Union and Kansas Pacific Railroads have appointed a committee to reorganize the road and to settle with the Government for its second mortgage upon the property.

"This reorganization committee propose to issue one hundred million of fifty-year 4 per cent bonds on about 1,900 miles of road. They also propose to issue seventy-five millions of preferred stock upon this 1,900 miles of road and assess the present common stock of these companies, which amounts to \$60,000,000, at 15 per cent. and thus raise \$9,000,000.

"The prescribed stock represents nothing. All of it but \$20,000,000, goes to manipulators of this proposed swindle. If this plan is carried out we will still as a government be in partnership for fifty years with the same men who have been our partners for the past thirty years.

"As our partners in the past they have swindled, stolen our property, bribed, debauched and disgraced our servants, plundered people along the line of the road by extortionate rates, while at the same time by a system of rebates and discrimination they have enriched a favored few; and where these favored few were private persons they were men who, it was supposed, had influence in the community where they resided and could influence public opinion; but usually their favors were showered upon corporations engaged in trade who were stockholders and officers and directors of this road.

“We are now asked to continue this partnership, to continue to have relations with those same men, and upon what basis? Upon the basis of fraud; upon a plan by which this Government is to be a party to an issue of stock for which no consideration is paid and upon which the public will be called upon to pay interest. There are 1,900 miles of road, one hundred millions of bonds, seventy-five millions of preferred stock and sixty millions of common stock—in all, two hundred and thirty-five millions of bonds and stock, or \$123,600 per mile.

“This 1,900 miles of railroad can be reproduced for \$23,600 per mile, and yet the Government of the United States is asked to go into partnership with a party of dishonest men and bond and stock the road for \$123,000 per mile, and the public whom this road serves is to be called upon to pay interest upon this vast sum. That any set of men could come to Congress with any such a proposition as this and expect it to be ratified by the representatives of a free people is an impeachment of the integrity of the people of the United States.

“But these men have so learned the habit of making corrupt propositions to each other by which the public shall be plundered and robbed in the reorganization of overstocked companies of every sort that they do not hesitate to make the proposition now in the open daylight to the American people, and it seems to me it is a matter for severe comment and censure that a committee of either body of the Congress of the United States can be found who will entertain it for one moment.”

“In this way the Government would realize every dollar the roads owe. The interest charge would only be 3 per cent. on \$100,000,000 of bonds, or \$3,000,000 per annum instead of \$7,750,000 under the plan proposed by the organization committee. The rates for carrying freight and passengers would be much less. There would be no incentive for discrimination of persons and places. Every man and every town would have an equal opportunity and the scandals of our Government with the Union Pacific management would disappear from the pages of our history.”

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